FOR DI PIKIN DEM WEL BODI
(THE HEALTH OF THE CHILD)

Community-based health initiatives implemented through social cohesion strategies in Koinadugu District, Sierra Leone

Annual Report
October 2004 to September 2005

submitted to
USAID Child Survival and Health Grants Program
Date of Submission: October 31, 2005

Cooperative Agreement: HFP-A-00-02-00046-00
October 1, 2003-September 30, 2008

CARE Sierra Leone Contact:
Nicholas Webber
CARE Sierra Leone
35 Wilkinson Road
Freetown, Sierra Leone
Tel: 232-22-234-253
Fax: 232-22-234-280
Email: webbern@care.org; cdcare@sierratel.sl

CARE USA Contact:
Joan Jennings
CARE USA
151 Ellis St. NE
Atlanta, GA 30303
Tel: 404-979-9147
Fax: 404-589-2624
Email: jjennings@care.org

Authors/editors include:

Boiketho Matshalaga Murima
Child Survival Project Manager
CARE Sierra Leone

Vandy Kamara
Child Survival Assistant Project Manager
CARE Sierra Leone

Maureen Cunningham
Consultant
CARE Sierra Leone

Joan Jennings
Senior Technical Advisor
Children's Health, Health Unit
CARE USA

List of abbreviations and acronyms

AED	Academy for education and development
AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infection
BCC	BEHAVIOR CHANGE COMMUNICATION
CARE-SL	CARE Sierra Leone Mission
CBGP	Community Based Growth Promotion
CBO	Community-Based Organization
CCF	Christian Children's Fund
CES	Christian Extension Services
CHC	Community Health Club
Chiefdom	Third level administrative unit in Sierra Leone, under the District.
C-IMCI	Community-Based Integrated Management of Childhood Illnesses
CO	Country Office (CARE Sierra Leone)
COPE	Client Oriented Provider Efficient
CRS	Catholic Relief Services
CS	Child Survival Project
CSTS	Child Survival Technical Services
DHMT	District Health Management Team
DIP	Detailed Implementation Plan
District	Second level administrative unit in SL, under the Region and above the Chiefdom
DMO	District Medical Officer, in charge of DHO
EPI	Expanded Programme in Immunization
GOSL	Government of Sierra Leone
HBLSS	Home-Based Life Saving Skills
HH	Household
HMIS	Health Management Information Systems
HIV	Human Immune Deficiency Virus
HLS	Household Livelihood Security
IEC	Information Education and Communication
IMCI	Integrated Management of Childhood Illnesses
ISA	Institutional Strengths Assessment
ITN	Insecticide Treated Mosquito Net
KPC	Knowledge, Practice and Coverage
LNGO	Local Non-Governmental Organization
LQAS	Lot Quality Assurance Sampling
MCH	Maternal and Child Health
M&E	Monitoring and Evaluation
MMR	Maternal Mortality Rate
MNC	Maternal and Newborn Care
MOHS	Ministry of Health and Sanitation, Government of Sierra Leone
NACSA	National Commission for Social Action
NID	National Immunization Day
NGO	Non-Governmental Organization
ORS	Oral Rehydration Solution

PHU	Peripheral Health Unit
PM	Program Manager
PRCA	Participatory Rural Communication Appraisal
PVO	Private Voluntary Organization
QA	Quality Assurance
QOC	Quality of Care
Region	The largest administrative unit at the sub-national level
Reproductive age	Refers to women aged 15-49 years
RH	Reproductive health
SFCG	Search For Common Ground
SCM	Standard Case Management
SL	Sierra Leone
TA	Technical Assistance
TBA	Traditional Birth Attendant
TD	Talking Drum Studios
TNA	Training Needs Assessment
TOT	Training of Trainers
TT	Tetanus Toxoid
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VA	Vitamin A
WRA	Women of Reproductive Age

1. Introduction

The Ministry of Health and Sanitation (MOHS) and CARE Sierra Leone have completed the second year of implementation of a USAID funded Child Survival XIX Project in Koinadugu District in the Northern Region of Sierra Leone. Implementation of project activities commenced October 1st 2003 and is scheduled to end September 30th 2008.

The project goal is to improve the health status of children under five and women of reproductive age (WRA) in Koinadugu, the largest and one of the most remote districts in Sierra Leone. The project operates in fifty-four villages within five of the eleven chiefdoms of the district. Project activities are implemented in collaboration with the District Hospital and twenty-one peripheral health units (PHUs) in the five operational chiefdoms of Wara wara Yagala, Sengbeh, Follosaba Dembelia, Dembelia Sinkunia and Neini. The population of these five chiefdoms are the primary beneficiaries of the project. New census data (although not finalized) has led us to revise the estimation of the principle beneficiaries of the project to 19,198 children under five and 27,101 women of reproductive age out of a total population of 112,921.

Secondary beneficiaries of the project include the populations of the six remaining chiefdoms in the district with a population of 121,409 (20,640 children under five, 29,139 women WRA). This population is served by 22 PHU. The total beneficiary population is therefore estimated at 39,838 children under five and 56,240 WRA as compared to initial project estimates based on 1985 census data of 48,630 children under five and 51,491 WRA.

The epidemiological picture in Koinadugu is characterized by a high incidence of communicable diseases such as malaria, which accounts for the greatest disease burden in Sierra Leone, acute respiratory infection and diarrheal disease. In the district, there are poor reproductive health statistics including high maternal and neo-natal mortality. Government-provided health services and facilities in Koinadugu District were devastated by the war. There was severe damage to social service infrastructure and reduced numbers of Ministry of Health and Sanitation staff to provide services as well as Health Managers to provide supervision, outreach and other forms of support to outlying health units and communities. There are 13% of the recommended 114 technical staff and 65% of the recommended 26 public health care delivery staff employed by the district. Koinadugu district currently has a ratio of 5,450 persons per peripheral health unit. It has a high ratio of persons per doctor at 117,165:1.

The project is implemented through innovative strategies that build partnerships between communities and government. The goal of the project will be achieved through the attainment of four principal objectives:

1. Strengthened family and household knowledge and decision-making skills related to the health of women and children resulting in the practice of positive behaviors to prevent, recognize and manage common diseases;
2. Enhanced community capacity to form groups and institutions that sustain health initiatives, demonstrate social cohesion, and promote good governance mechanisms;

3. Improved quality and accessibility of services provided by MOHS personnel and MOHS extension services; and,
4. Ensured sustainability of the activities and achievements of the project.

Project implementation focuses on the following four interventions through the C-IMCI strategy:

The **expanded programme in immunization (EPI) Intervention (15%)** focuses on raising vaccination coverage of children and pregnant women. CARE is working with communities and MOHS to promote EPI outreach through the Community Health Clubs (CHCs). The second prong of the EPI strategy is to encourage CHCs to use appropriate BCC strategies to increase demand for and utilization of EPI services.

The **nutrition intervention (20%)** works through CHCs and other community-based organizations (CBOs) to promote early initiation of breastfeeding, exclusive breastfeeding, complementary feeding and improved Vitamin A (VA)/iron intake for women and children. CARE implements complementary multi-sectoral activities that support improved nutrition such as water and sanitation projects, farmer field schools and nutrition gardening in the District.

The **malaria intervention (35%)** confronts the high prevalence of malaria and the common practice of self-treatment by training peripheral health unit staff to recognize malaria and provide standard case management, educating community members about malaria and its treatment, promoting intermittent presumptive treatment of malaria amongst pregnant women and promoting and distributing insecticide treated mosquito nets (ITNs) through social marketing

The **Maternal and Newborn Care** (**MNC) intervention (30%)** aims to improve access to information and basic maternal health care by providing educational sessions on danger signs recognition and birth preparedness at the community and household level, promoting Tetanus Toxoid (TT) vaccination and iron supplementation for pregnant women and VA supplementation for postpartum women, and training PHU staff in intermittent presumptive treatment of malaria in pregnant women.

2. Overall Project Progress

This report on the project's progress covers the second year of implementation from October 2004 through September 2005. Overall, project activities are on target and the project is proceeding towards the attainment of its objectives. Findings from LQAS and other information collected show that the project is stimulating very positive behavior change at the community level as well as both improved outreach by PHU staff and increased ownership of project activities at both the community and district levels. Some of the project's key areas of accomplishment are highlighted in the following four tables which detail progress toward each of the project's objectives.

Tables: Progress Toward Reaching Objectives

Objective 1: Strengthened family and household knowledge and decision-making skills related to health of women and children resulting in the practice of positive behaviors to prevent, recognize and manage common diseases.		
Key Activities (as outlined in the DIP)	**Status of Activities**	**Comments**
a) Facilitate formative research on feeding practices and food availability, health beliefs, social norms (including positive deviance), perception and management of disease, care seeking practices, profile of community based health providers.	a) **Completed**: Conducted Participatory Rural Communication Appraisal (PRCA), July 2005.	
b) Implement health promotion/education campaign through CHCs targeting household knowledge, beliefs and practices.	b) **Completed:** 25 Participatory Health promotion sessions planned and conducted with 56 CHCs.	Another CARE project conducts health sessions with club members from 21 of CSP's 54 participating villages.
c) Develop a productive interface between community surveillance systems developed by CHCs and PHU that result in problem identification and response.	c) **On target:** 56 CHCs produce monthly health activity plans. CARE revising community disease surveillance boards for data based planning by CHCs together with PHUs.	
d) Develop BCC strategy and materials for communication.	d) **On target:** Draft BCC strategy developed at DIP stage. Revised CHC toolkit to be finalized by December 2005.	CARE is developing a field agent's toolkit, *Communicating Health, Communicating Rights,* to facilitate health based communication in post-war communities.
e) Conduct training needs assessment (TNA) for community-based organizations, local partner organizations, MOHS and CARE staff.	e) **Completed**	
f) Train PHU staff and CHC members to implement BCC strategy to members of community resulting in decrease in harmful practices, increase in practice of beneficial preventive practices, improved recognition of danger signs and increase in appropriate care-seeking behavior.	f) **On target:** Community-based growth promotion (CBGP) training for PHU staff from 21 facilities – Aug 2005. 25 Health sessions conducted for 56 CHCs. 1,336 portable 3 band radios distributed to graduated CHC members. 35 radio sessions aired on local radio station.	

Objective 2: Improved quality and accessibility of services provided by MOHS personnel and MOHS extension services.		
Key Activities (as outlined in the DIP)	**Status of Activities**	**Comments**
a) Promote dialogue between communities and PHUs.	a) **On target:** On-going planning between Village Development Committees, CHCs and PHUs on pertinent health issues.	
b) Conduct quality of care assessment with MOHS and UNICEF.	b) **On target:** Client-Oriented Provider Efficient (COPE) quality of care assessment conducted May 2005.	COPE assessment action plan and recommenda-tions to be implemented in year 3 and 4.
c) Facilitate training and implementation in supervision, training of trainers and quality assurance for PHU staff.	c) **Initiated, activity not yet on target:** Training needs have been identified and training will be conducted in Year 3 and 4.	
d) Build nutritional counseling and services for pregnant women into outreach services provided by PHUs and CHCs (supervised by PHUs).	d) **On target:** CBGP TOT for PHU staff from 21 facilities (August 2005). TOT included nutrition counseling and negotiation for low-literate populations.	Training of PHU staff on IMCI and other treatment guidelines and the supply of basic equipment for facilities scheduled for year 3.
e) Work with District Health Management Teams (DHMT) to identify and prioritize problems in district health services (including HMIS) and design and implement solutions that are based on qualitative and quantitative data.	e) **On target:** Training of DHMT members on MOHS information system as well as basic computer software packages, data analysis and interpretation done in the first year of the project.	
f) Assess organizational development and physical needs of MOHS in Koinadugu and support capacity building activities.	f) **On target:** COPE Assessment, May 2005 details staffing, supplies and equipment deficits to be addressed in years 3 and 4.	Administrative capacity building of Radio Bintumani is being spearheaded by Search for Common Ground through another CARE project.
g) Conduct training needs assessment for community-based organizations, local partner organizations and MOH staff.	g) **Completed**	
h) Adapt/develop curricula for training of community health workers in collaboration with MOHS.	h) **Initiated, activity not yet on target:** Completed in the Nutrition Intervention. To be conducted in Year 3 and Year 4 for the remaining interventions.	
i) Conduct ongoing monitoring of CS project results in collaboration with DHMT/PHU colleagues and feed result back into project including the use of LQAS.	i) **On target:** COPE results shared with all District health NGOs and stakeholders. LQAS Survey conducted. Results to be shared by November 2005.	

Objective 3 : Enhance the community capacity to form groups and institutions that sustain health initiatives, demonstrate social cohesion and promote good governance mechanisms.		
Key Activities (as outlined in the DIP)	**Status of Activities**	**Comments**
a) Facilitate formative research on attitudes and beliefs of community members regarding rights, civil society, community action to identify and act on communal problems, community support for GoSL health services.	a) **Completed**: Food Security Rights Based Approach Project Solidarity Index baseline survey conducted, February 2005.	
b) Facilitate community dialogue regarding health volunteers and their roles and responsibilities both to communities and to PHUs.	b) **On target:** CHC sessions emphasize roles and responsibilities of health volunteers such as TBAs, vaccinators and CHC members.	
c) Assist well run CHCs to identify needs of their organizations and provide TA to build their capacity.	c) **On target** 56 CHCs develop and implement monthly activity plans.	
d) Facilitate the formation and training of community based growth promotion groups emerging from CHCs.	d) **Initiated, not yet on target:** CBGP TOT (Aug 05) conducted for PHU staff from 21 facilities. Volunteer training to be completed in first quarter, of Year 3.	
e) Collaborate with communities in a participative evaluation of their own efforts.	e) **On target:** Monthly review of CHC and VDC activity plans and accomplished activities, facilitated by project staff.	
f) Assist communities and CHCs to access multi-sectoral development opportunities to improve their communities.	f) **On target:** The project has facilitated institutional linkages between CHCs/VDCs and other development agencies at district and chiefdom levels.	
g) Advocate with GoSL at national and district levels to develop policies/processes that support responsibly managed community level initiatives in remote areas where GoSL does not provide adequate services.	g) **On target:** District level advocacy for initiation of community-based growth promotion to increase the number of outreach points in more remote areas.	

Objective 4: Sustainability of the Child Survival Project		
Key Activities (as outlined in the DIP)	**Status of Activities**	**Comments**
a) Participate in Community, District and National level monthly, quarterly and annual collaboration meetings and work sessions on issues pertaining to CS, Malaria, Nutrition, Maternal and Newborn Care (MNC) and EPI.	a) **On target:** Project participated National Malaria, Nutrition Working groups and District Quarterly Health Inter-sectoral meeting.	
b) Provide TA for organizational development and capacity building.	b) **On Target:** TA provided for Institutional Strengths Assessment for partner (CES). Training on PRCA for partners partner (Christian Extension Services) CES and Radio Bintumani. Training on CBGP, COPE assessment training facilitated for MOHS. Review of HMIS for MOHS.	
c) Advocate for opportunities for partners to achieve or work towards financial viability.	c) **On Target:** Supply of information on fund-raising to partner (CES). Project promotes radio programming for Radio Bintumani.	
d) Support the planning process for the re-establishment of the District Medical Store.	d) **Initiated, activity not yet on target:** Construction material for the rehabilitation of the medical stores procured. Store-facility to be completed after rehabilitation of the district hospital by World Bank in 2006.	

A description of some of the key accomplishments of the project can be found below.

2.1 Capacity Building of Institutions and Partners

Due many years of civil unrest, the institutional capacity of the MOHS and other village and community based partners working in Koinadugu is understandably very low. However, to attain project objectives and most importantly to sustain those objectives over time, the capacity of these partners must be improved. Therefore, one of the main strategies of the project is to build the capacity of institutions and partners through training, organizational diagnosis activities and subsequent support for improvements. To date the project has initiated dialogue with project partners and has determined directly or with other stakeholders the organisational capacity of partners. Subsequently action plans have been developed and are being implemented to target specific areas of need.

2.1.1 Community Based Institutions

Village Development Committees

The Child Survival Project (CSP) is implemented with the collaboration of Village Development Committees (VDCs). VDCs, tasked with the overall planning and management of village issues, play a critical role in the oversight of community based health initiatives. In preparation for this

task, training was provided to forty-eight VDCs on basic management concepts during the first year of the project. In year two, the VDCs were supported in the planning and implementation of various community development activities. Some of the successful community development activities carried out include the construction of a community managed school in Makakura village, the construction of child delivering huts for traditional birth attendants in six villages and the construction of an access road to facilitate the delivery of ITN and drugs in Sumbaria PHU in Neini

2.1.2 Ministry of Health and Sanitation

The MOHS is the primary partner of the Child Survival Project. It plays a critical role in the improvement of the quality and accessibility of health and extension services. The partnership between the CSP and MOHS has been initiated and is co-coordinated through the District Medical Officer (DMO). The staff of the District Hospital and 21 PHUs are the project's counterparts on the ground, and are responsible for implementing the improved quality services that the project aims to provide.

The Health Systems review undertaken during the first year of the project was instrumental in the successful diagnosis of key issues confounding the delivery of health services. Key issues that have been addressed include an improvement in the multi-sectoral planning process on District Health issues such as National Immunization Days and Malaria prevention interventions.

The COPE quality of care assessment conducted in May 2005 can be considered as a capacity building exercise as well as a quality improvement effort. The District Health staff were involved and developed a clear understanding of the difference between the MOHS primary health care standards and the present state of health delivery in the district. The COPE assessment also brought buy-in from other NGOs working in the district who expressed their commitment to improving equipment and supply deficits.

The devolution process for central government functions commenced on the 20th of February 2004. The District Council in Koinadugu is currently engaged in discussions for the transfer of some MOHS functions and responsibilities. Through the sharing of the COPE assessment, the Local Council was able to understand some of the issues reducing the quality of the delivery of health services and has made a commitment to ensure that health remains on their agenda for district development.

2.1.3 NGO Partners

Christian Extension Services (CES)

The CSP works with CES, a local NGO operating in Koinadugu District, to build the capacity of the NGO in participatory health education services, which are being provided by CES. CES has already participated in the project's Participatory Rural Communication Appraisal to determine key confounding factors in health behavior change at household level. CES will receive community health club training from CARE once the revised CHC toolkit has been finalized in December 2005.

During the period under review, the project successfully conducted an Institutional Strengths Assessment (ISA) of CES. The ISA was useful in that it provided a self-assessment of CES's health programme, technical experience and the quality of backstop support to field projects. After the ISA it is clear what issues need to be reinforced between headquarters staff and field sites as well as what effort is required in the collection of data that can be used to advocate for additional resources for health-related operations within the larger organization. During the next reporting period, the project will undertake training of CES on the use of the new participatory health communication toolkit with new Community Health Clubs.

Radio Bintumani

Poor roads and low literacy make radio an especially important medium of information and communication in the district. CSP collaborates with the local radio station, Radio Bintumani, for effective health promotion. The project, together with other CARE programmes utilizing the radio for communication, has mapped out an effective integrated strategy for promoting the viability of the radio station and for airing programmes to reach communities.

During the review period, the diagnosis of organisational capacity of Radio Bintumani was conducted by Search for Common Ground (SFCG) working in partnership with CARE. SFCG is an international NGO actively engaged in advocacy and media development in Sierra Leone. SFCG is working with Radio Bintumani and print media to address human rights and governance issues. It provides practical guidance for moving towards more long-term, sustainable development programs. SFCG's needs assessment of Radio Bintumani indicated that it requires capacity building within the areas of organizational, human resources and technical development. SFCG is building the capacity of Radio Bintumani through the provision of equipment (support, broadcast and production), training of staff in leadership and operational mechanisms and revenue generation (internal and external fundraising). CARE's overall strategy is to complement SFCG efforts to maintain the viability of the radio station through the airing of community development radio programmes.

2.2 Behavior Change Communication (BCC)

The project developed its BCC strategy during the preparation of the Detailed Implementation Plan. Implementation of the BCC strategy is on target primarily due to the completion of a scheduled twenty-five health promotion sessions with each of the 56 Community Health Clubs organized through project efforts. The CHCs have engaged and stimulated dialogue within communities not just on health issues but on related community development initiatives such as education of girls. The development and airing of health radio programmes within the project has also been a notable success.

Lot Quality Assurance Sampling Survey (LQAS)

The Child Survival Project in Sierra Leone uses Lot Quality Assurance Sampling (LQAS) as part of its impact monitoring. The initial LQAS survey was carried out in April 2005. LQAS findings demonstrated differences in chiefdom coverage rates in behavior and health outcomes. Health communication and other innovations implemented in areas with high coverage rates will be replicated in other chiefdoms that have low coverage rates. The detailed report is annexed.

Participatory Rural Communication (PRCA) Survey

The PRCA is a quick, multidisciplinary and participatory way to conduct communication research. It actively involves the people concerned in the research process to ensure that communication for development programmes is effective and relevant to their lives. A PRCA exercise was conducted in Koromasilaya village in July 2005. The village selected for the exercise by project staff was thought to be representative with regards to culture and practice of the project beneficiary population. Some key findings of the PRCA exercise include the following:

- Poverty is the major reason why families do not go to health clinics for treatment but attitudes of the health care providers also deter community members from attending clinics. Distance from the PHU is also a contributing factor for clinic use.
- Decisions for clinic attendance is highly influenced by men.
- TBAs command high respect in the community as they conduct deliveries free of cost and they are always available.

- The major source of health information in the village is the community health club and the local FM Radio station, Radio Bintumani.
- People in the village view poverty as the primary cause of maternal death.
- Participants strongly linked early marriage and lack of girls' education to maternal death.
- When mothers die during child birth, the burden of child-care for their surviving children falls on the rest of the family and is very heavy for them to bear.

The findings of the PRCA exercise will be used to refine approaches in the current BCC strategy and develop more appropriate health communication messages.

Community Health Clubs (CHCs)

A total of 56 CHCs were formed in the villages where the CSP is being implemented. The purpose of these CHCs is to raise community awareness on health issues and encourage participation in project activities. Membership into the clubs is voluntary, however club members must be residents in the villages. The clubs meet once a week to discuss health related topics of concern in their communities with project staff providing technical guidance and support. In the first year of the project, CARE SL Community Health Mobilisers facilitated up to 25 participatory health sessions in each of the 56 CHCs at agreed upon times. Participatory health sessions continue to be in great demand within the community due to the vibrant interaction they bring about. In addition to the1,882 CHC members trained during the first year of the project another 1,703 new club members (740 males and 963 females) are

Being a member of the CHC changed my life.

I have learnt a lot from the CHC sessions. Looking back, one day when I took my son to the barber to shave his head, I was alarmed when the barber took an old used razor blade to shave his head but, being that we have been told during our weekly sessions that sharing sharp instruments could transmit the HIV/AIDS virus, I went to the shop to get a new razor blade for the barber to use it. I went further to explain the reason why I had bought the new razor blade for the barber.

The CHC has brought significant change in my life. I can now sit together even with the men in my community and be part of discussions and decision making about the village. I was always shy in making public statements because I thought my contributions were not meaningful, but with the arrival of CARE with the CHC clubs, together with the rest of the women in the community I have felt very useful in meetings and decision making in terms of developing the village.

(Isatu Shaw, CHC Member, Gbindi II, Sierra Leone)

currently undergoing CHC training in 21 of the 56 project communities in collaboration with another CARE health project.

Within the 56 CHCs in the project area,

- 85% conduct at least 10 health meetings within the past year
- 91% have documented female membership of at least 40%
- 100% have a documented set of organisational by-laws

Monthly health action plans are developed and implemented by CHC members. Health action plans include activities such as assisting with health education sessions at PHUs and mobilizing community members for village sanitation activities and construction of bridges and roads. All 56 CHCs have successfully defined an activity to implement every month.

The project is revising the CHC toolkit – *Communicating Health, Communicating Rights*. The toolkit is for field agents working with community health clubs and is in two parts--a manual and a set of visual aids and flashcards. Field workers achieve remarkable results with these materials by embracing the core principles of participatory methodology: respect and dignity for all. The methodology is highly participatory and allows illiterate and marginalized members of communities to fully engage. Learning sessions teach basic information about health and help participants to explore individual rights and to create healthier power dynamics and relationships within households and communities. Several NGOs operating in Sierra Leone have expressed interest in using the toolkit, which will be disseminated following its completion early in 2006. It is the project's plan that the toolkit, as well as positive experiences that have emanated from its use, will be shared in year three of the project.

CHCs and Radio Communication

Project staff, Ministry of Health staff and CHC members participated in the successful design and production of appropriate health communication messages. Jingles (21), panel discussions (4), health songs (8) and interviews (2) were aired on the local radio station, Radio Bintumani, in the local languages. To increase the number of listeners, 1,336, handheld portable radios were distributed to CHC members who attended more than 20 of the scheduled 25 health sessions facilitated in their clubs.

The Academy for Education and Development (AED) has completed the production of a radio health communication package called SPOT on Malaria. The CSP intends to train local radio personnel on SPOT methodology as the kit has since been acquired.

Promoting Dialogue and Collaboration Between MOHS and CHCs

CARE and MOHS staff working in 21 PHUs, jointly conducted the training and supervision of 56 CHCs in the project. This has initiated dialogue between PHU staff and CHC members within their catchment areas. CHCs participate in PHU-led health interventions in their communities such as verification of beneficiaries for receipt of free insecticide treated nets. Recently the CHCs played a vital role in the distribution of Vitamin A capsules to children in schools and communities. The distribution took place on the commemoration of the Day of the African Child on June 16, 2005. This event was organized by UNICEF and the MOHS and supported by all health related Private Voluntary Organizations (PVOs) in the district.

Within the next year, selected CHC club members will undertake training as volunteers to implement community based growth promotion (CBGP).

CHC members have also successfully participated in community based disease surveillance. Two disease-monitoring volunteers (a male and female per village) were selected from each CHC. These volunteers participated training on disease surveillance led by CARE SL and MOHS staff. Topics included disease recognition, tracking, recording and reporting of common communicable diseases, such as diarrhea, malaria, ARI, etc. PHU staff monitor the surveillance volunteers. CARE SL staff will continue to work with PHU staff and community surveillance volunteers to build their capacity and facilitate the analysis and use of surveillance data to find viable solutions to pertinent health problems.

2.3 Quality Assurance Initiatives

The project conducted a successful diagnosis of issues compromising the delivery of quality health care services in Koinadugu District through the Client Oriented Provider Efficient (COPE) Assessment. The assessment conducted in May 2005 laid the groundwork for activities to improve the quality of health services not just in the 21 PHUs in the project intensive area but in the remaining 22 PHUs of the district through improved management by the District Health Management Team.

COPE Assessment

The COPE tool was selected because it is participatory, broad yet easy-to-use, and contributes to building the capacity of field staff and health staff partners to include assessment as an on-going monitoring tool for continuous improvement. COPE focuses on practical steps of improvement through the development of Action Plans at every step. COPE also highlights gaps in perception between the community and health providers, which can lead to greater "buy-in" by the community as they see their suggestions acted upon.

In this seven-day assessment, eight of the ten recommended COPE Self-Assessment Guides for Child Health Services were included. Guide 10, *Staff Need for Supplies, Equipment and Infrastructure*, was adapted to the Sierra Leone National Primary Health Care Manual Checklist of inputs. These self-assessment tools were used by the COPE assessment team to facilitate numerous Guided Discussions, much like focus groups, with groups of health care staff and with community-based groups. Additionally a short interview and checklist were developed and used at all PHUs in the project area. The tool for Client Exit Interviews was also used in this assessment, with 15 clients at the District Health Center and 12 PHUs. As national IMCI protocols have not yet been introduced in rural health facilities in Sierra Leone, the COPE-IMCI Record Review was not utilized. Additionally, as the Health Posts that the project works with are struggling with under-utilization, the Patient Flow Analysis tool was also postponed to a future exercise.

COPE exercises were conducted and COPE Action Plans developed with Community Health Clubs, PHU clinic staff, District Hospital Staff and DHMT members. These action plans and

findings were presented to the District Health Management Team (DHMT) and NGO community. A new District Coordinating Committee was initiated which will have the follow-up of the various COPE action plans and recommendations as a monthly agenda item.

Findings from Client Exit Interviews

MOH and CARE project staff carried out 15 one-on-one Client Exit Interviews in the mornings at the District Hospital and at four PHUs. Key results from Client Exit Interviews showed that clients used the services for both curative and preventive care, including vaccinations, growth monitoring and promotion, ante natal and post natal care. Clients generally expressed satisfaction with services and felt they had received what they came for, with only a few waiting an excessive amount of time for treatment. Although health staff have not had recent training in counseling, Client Exit Interviews showed that most clients were given at least some messages during their visits on such topics as immunization, breastfeeding and malaria. Most clients stated they were clearly instructed how to take medicines prescribed and were given simple care practices for sick children. They were aware of the presence of family planning services at the health facility. They described staff as polite and appreciated clean bed nets and sheets at the facility. They disliked limited staff, expensive drugs and fees and unclean facilities.

Findings on the Perception of CHC members

In order to gain a greater understanding of client and potential client perceptions of health care facilities, six guided discussions were carried out with CHC members in three communities. The perception of CHC members was varied. Several positives were noted; such as encouragement to give birth in health facilities and explanation of sick child care measures. Most problems were related to the cost of care, difficulties for transport and referral to the next level of care, and increased need for outreach by health facilities. Community members also expressed a need for HIV testing at local health facilities.

Findings on Staff Needs

Six Guided Discussions were conducted with Health Unit staff from three different facilities. Personnel, equipment and supplies checklists were also administered in 15 of the 21 PHUs. The completed checklists highlighted a lack of equipment and materials (from soap to beds to laboratory testing), a lack of education materials on certain topics (STI/HIV, family planning), and infrastructure repair needs among other issues. Guided Discussion with District Hospital staff noted a variety of positive factors, such as the availability of hand washing and disposal facilities and focus by staff on maternal care and child health issues. However, weaknesses in almost all systems were also noted, such as a lack of disinfectant, sufficient staff, functioning health information system and other.

Checklists revealed serious under-staffing at the district and Primary Health Unit levels as compared to national guidelines. A lack of some supplies was found, but with inconsistent results per health facility. A surprisingly low stock of essential medicines was found at a few of the PHUs and a plan for further inventory and supply, if necessary, was one of the key elements of the Action Plan from this assessment. Transportation is available roughly at the level called for by national norms, including one ambulance, two four-wheel drive vehicles and eight functioning motorcycles.

COPE Assessment Feedback

The COPE Assessment team had full participation during the process by the District Health Operations Officer and the Social Mobilization Officer from the District Health Management Team. Four other members of the DHMT attended and actively participated in discussions at the presentation of the key findings at the end of the assessment process. While the DHMT had a positive and supportive attitude towards the COPE process throughout, other DHMT staff moved from an initial stance that was somewhat defensive to appreciating how the COPE tools can be helpful in their work by guiding supportive supervision and monitoring inventory.

The formation of a follow-up COPE committee was suggested early on by assessment participants. As momentum grew between the DHMT, the District Council, UNICEF, and CARE, the group approved re-launching the District Coordinating Committee. This time it will be chaired by the DHMT rather than an NGO as was previously the case. COPE follow-up will be a monthly agenda item for this group and, if it goes as planned, will be a very positive contribution towards project sustainability. The full report of the COPE assessment is annexed.

2.4 Health Systems Strengthening

The health information systems review successfully conducted in the first year of the project saw an improvement in the awareness of district staff in collecting and managing data manually as well as electronically.

In the past year, the CSP has worked together with the DHMT to assess their ability to utilize data collection tools and processes on a regular basis for supervision as well as planning future action steps. Following the COPE Assessment, the development of supervision checklists for use at facility level is envisaged to facilitate self-assessment at facility level as well as two-way discussion for supervision. Other supervision activities to be developed include review of PHU records. This will allow for strengthened forms and record keeping to contribute to a smoother Health Management Information System (HMIS).

PVO co-ordination and collaboration in health systems strengthening

Within the Northern Province, CARE SL works in collaboration with other health PVOs. Project staff participated in all district level health planning meetings organized by the DHMT. Additionally, CARE is a member of the district level National Development Co-ordination Fora that convenes monthly and in which advocacy for improvement of health systems is carried out.

CARE's Child Survival Project team visited the International Rescue Committee (IRC) Child Survival Project XIX in Kono District from the 22nd to the 26th of August 2005. Both projects are implementing facility and community based activities to improve the health status of women and children in their respective geographical locations. The Kono district health facilities are better staffed and significantly better equipped than those of the Koinadugu district. The visit provided an immense learning and exchange opportunity for project staff to see a more efficient district health facility and peripheral health units. After the visit to the IRC CSP area, staff compiled a series of innovations and activities that seem to be working well and could be replicated in health facilities in Koinadugu District. The IRC project team reciprocated the visit from the 5th to the 9th of September 2005.

3. Intervention Specific Progress

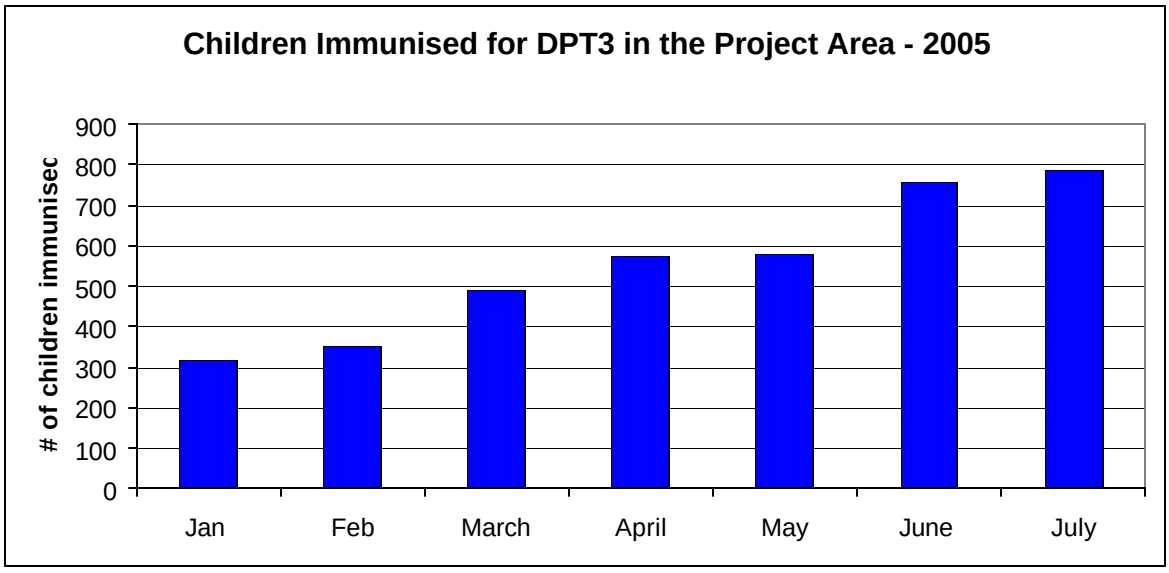
3.1 Immunization (15%)

The project's immunization intervention focuses on raising the vaccination coverage of children and pregnant women from current low levels. The baseline for the project showed that 45.7% of children aged 12–23 months are fully vaccinated (against the five vaccine-preventable diseases) before their first birthday[1]. While in the first year of the project, 1,882 CHC members received health education on immunization, this year the same members participated in the successful mobilization of their communities for the following four national immunization days:

Polio	(8-10 October 2004)
Polio and Vitamin A	(19-21 November 2004)
Polio and Vitamin A	(25-27 February 2005)
Polio	(8-10 April 2005)

The project supported the supply of vaccines at the 21 PHUs and facilitated the organization of 56 of 84 outreaches conducted from May to September 2005 by the district's 21 PHUs. CARE is currently working with the MOHS to ensure a sustainable maintenance system for the cold chain equipment in the project's operational locations.

The graph below depicts the number of children in the project area who were immunized for DPT3 within the period from January to July 2005. The project support to EPI through outreach, mobilization for national immunization days and supporting cold chain management has resulted in more than 200% increase in the number of children immunized through PHUs in the project area.



Source : Koinadugu MOHS monitoring data, 2005

Immunization statistics collected at the District Hospital still reflect coverage rates of beyond 100% due to the fact that statistics utilized by PHUs were from the national census of 1985. The

[1] CARE Sierra Leone, Child Survival Baseline Survey Report, April 2004

project cannot quote these statistics but is assisting PHUs with the quantification of catchment populations to provide better quality EPI rates.

Key Activities for EPI (as outlined in the DIP)	Status of activities	Comments
BCC 1. Raise awareness of the importance of vaccination and date/time/place where vaccination services are available and community demand for EPI services.	**On target:** Aired radio jingles and panel discussions announcing National Immunization Days (NIDs). Conducted mobilization through CHCs for active participation in NIDs and 56 outreaches around 21 PHUs.	
2. Facilitate the promotion of immunization in communities.	**On target:** conducted immunization education sessions for 1,882 members of 56 CHCs.	
Quality and Access to Services 3. Support the identification and training of community volunteers (vaccinators) by .	**On Target:** MOHS and UNICEF selected and trained vaccinators in the project area.	UNICEF plays a major role in the district in training vaccinators.
4. Facilitate PHU staff expansion and improvement of consistency of EPI outreach services.	**On target:** Facilitated 21 PHUs in setting up and maintaining outreach services through mobilization and pre-positioning of logistics to outreach points.	
5. Ensure accurate record keeping by PHU staff to track EPI coverage.	**Initiated, activity not yet on target:** PHUs are being assisted to update their catchment populations based on latest census results to improve quality of coverage data.	
6. Train District Health Staff to manage EPI data electronically.	**Completed:** District Staff trained on electronic data management in Year 1.	
7. Facilitate the provision by PHU staff of quality primary care services at PHUs. Modification of PHU supervision checklists to assess cold chain, supply and correct administration.	**Initiated, activity not yet on target:** Supervision checklists are being modified with DHMT staff.	
Cross-cutting Activities 8. Facilitate community dialogue regarding health volunteers and their roles and responsibilities both to community and PHUs.	**On target:** Together with VDCs and CHCs, facilitated identification of roles and responsibilities.	
9. Facilitate the monitoring of immunization status of Children by CBGP volunteers.	**Not started:** CBGP volunteers currently being registered and will be trained in year 3.	

3.2 Nutrition (20%)

The project works through CHCs and other community based organizations (CBOs) to promote the early initiation of breastfeeding, exclusive breastfeeding, complimentary feeding and improved Vitamin A /iron folate for women and children. In year one CHC members were trained in six nutrition related participatory education sessions. During the reporting period, CHCs provided tremendous support for the mobilization of communities to participate in four campaigns for Vitamin A supplementation. The project developed a draft community based growth promotion manual and trained PHU staff from 21 PHUs on CBGP.

Key Activities in the Nutrition Intervention (as outlined in the DIP)	Status of Activities	Comment
BCC 1. Develop BCC strategy on Nutrition.	**Completed:** Also participated in MOHS and HKI facilitated National BCC strategy for Vitamin A and Iodine.	
2. Promote and support exclusive breastfeeding and complimentary feeding, Vitamin A supplementation, iron folate for pregnant women among CHCs and on radios.	**On target:** 35 radio programmes on nutrition developed and aired through Radio Bintumani. 56 CHCs conducted six sessions each on exclusive breastfeeding, complementary feeding and improved Vitamin A (VA)/iron intake for women and children.	
Quality and Access to services 3. Build nutritional counseling and services for pregnant women into outreach services provided by PHUs and CHCs (supervised by PHUs)	**On target:** CBGP training TOT (Aug 05) for PHU staff also discussed nutrition negotiation and counseling.	HKI Nutrition health facility assessment in Koinadugu indicated some gaps and priorities for action that the project is taking into consideration.
4. Oversee implementation and supervision of CBGP activities in the participating communities.	**On target:** Draft CBGP manual developed. CBGP TOT conducted with PHU staff from 21 facilities.	
5. Facilitate the implementation and supervision of Positive Deviance (PD) Hearth activities.	**On target:** Project staff attended PD Hearth training organized by CRS (4-11 February 2005). PD Hearth activities to commence in Year 3.	
6. Facilitate community's access to Vitamin A supplementation.	**On target:** Mobilized community for National Immunization Day for Vitamin A on the Day of the African Child (16 June 05). Organized 56 outreach days with 21 PHUs.	
7. Facilitate de-worming of project beneficiaries.	**On target:** CARE project organizing for deworming in the project area.	
Cross-cutting issues 8. Facilitate child-registration and participation in CBGP sessions.	**On target:** UNICEF and MOHS organized child registration for project beneficiaries.	

25 nutrition gardens were set up and managed by CHC members in order for them to share experiences on the production of locally available foods for home consumption and to reinforce the message of "Eating more and not selling all" to other community members.

3.3 Malaria (35%)

The Child Survival Project intervention on malaria confronts the high prevalence of malaria and the problem of self treatment by training PHU staff in recognition of malaria and standard case management, educating community members about malaria and it's treatment, promoting intermittent presumptive treatment of malaria amongst pregnant women and promoting and selling ITNs through social marketing.

Initial promotion on malaria prevention and control was undertaken with CHCs in year one of the project. During the reporting period, 46 PHU staff were trained in standard case management of Malaria using the new national treatment protocols. Malaria treatment drugs were supplied to all 21 participating PHUs. The project distributed 4,431 Olyset long lasting insecticide treated nets to the target population.

Key Activities in the Malaria Intervention (as outlined in the DIP)	Status of activities	Comments
BCC 1. Develop BCC strategy on Malaria.	**Completed**	
2. Facilitate health promotion on malaria management, prevention and control.	**On target:** 56 CHCs received participatory health education on malaria prevention and control. 18 radio programmes on Malaria prevention aired on Radio Bintumani.	
Quality and Access 3. Increase availability of ITNs to the target population.	**On target:** Distributed 4,431 free long lasting insecticide treated Olyset bed nets to women and children in collaboration with UNICEF and DHMT.	
4. Facilitate the increased availability of anti malaria medications.	**On target:** 52,000 Sulphadoxine Pyrimethamine and 855 packs of Artesunate and Amodiaquine distributed to 21 PHUs. UNICEF facilitated training of all PHU staff in the District on Standard Case Management for Malaria	
5. Facilitate training in supervision, training of trainers and quality assurance for DHMT/PHU staff.	**Initiated, activity not yet on target:** Revision of supervision checklist currently underway.	To be implemented in year 3.
6. Facilitate the collection and analysis of data on Malaria from PHUs.	**Initiated, activity not yet on target:** On-going review of collected statistics for analysis.	
7. Collaborate with partners in health delivery (UNICEF, MOHS) to, provide PHUs with basic medical equipment to support IMCI.	**On target:** COPE equipment checklist demonstrated gaps. Procurement of equipment for facilities to be conducted in year 3.	
Cross-cutting Issues 8. Advocate with GoSL at national level to develop policies/processes that support responsibly managed community level initiatives in remote areas where GoSL does not provide adequate services (e.g. sell GoSL provided ITNs or essential drugs).	**On target:** Project is fund-raising for the social marketing of ITNs in the most remote areas of Koinadugu district. CARE participates in the National Malaria Working group advocating for reduced tariffs on malaria prevention products.	

During the reporting period, the Government revised guidelines on the free distribution of ITNs to include free nets for:

- children under five years of age immunized with the DPT 3 vaccine
- fully immunized children (if their card does not indicate that they received a free ITN at previous distributions)
- children that have received the second dose of Vitamin A
- pregnant women at first contact with the health service provider

The table below indicates the number of nets the project has distributed to date. Clearly children who have received DPT3 vaccines constitute the largest beneficiary group for these nets and thus ITN distribution during outreach may have an indirect benefit of improving the immunization status.

Table 1: Cumulative distribution report for ITNs in project operational chiefdoms (May – August 14th 2005)

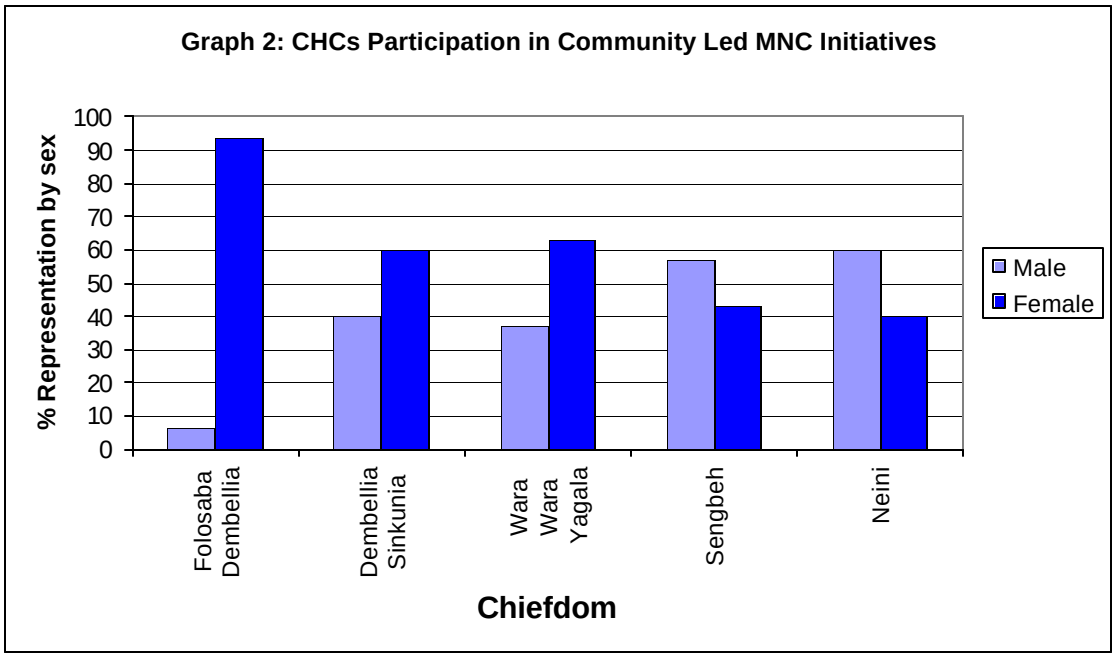
Name of Chiefdom	Total No. of ITNs distributed	Target group		
		Pregnant women	DPT 3	Fully Immunized under fives
Folosaba Dembelia	699	126	573	0
Dembelia Sinkunia	308	92	196	20
Wara Wara Yagala	812	113	375	324
Sengbeh	698	171	349	178
Neini	578	189	355	34
Grand Total	**3,095**	**691**	**1,848**	**556**

3.4 Maternal and Newborn Care (MNC) – 30%

The Child Survival Project intervention on Maternal and Newborn Care focuses on improving access to information and basic maternal health care. This is done primarily by facilitated health educational sessions on the recognition of danger signs during pregnancy, birth preparedness at household and community levels, promoting iron supplementation, Vitamin A and TT vaccination for pregnant women. Training PHU staff in intermittent presumptive treatment of malaria in pregnant women is part of the project's approach for improving the quality of MNC services. CHCs received health education on issues of maternal and newborn care and have proceeded to set-up community referral systems using hammocks and other locally available modes of transportation.

Key Activities in the MNC Intervention (as outlined in the DIP)	Status of Activities	Comment
BCC 1. Develop BCC strategy on MNC.	**Completed:** BCC strategy on MNC developed.	
2. Conduct health promotion on appropriate MNC practices, birth preparedness, tetanus toxoid vaccination and iron supplementation for pregnant women and Vitamin A supplementation for post partum women.	**On target:** Facilitated 6 sessions with 56 CHCs and staff from 21 PHUs on good MNC practices.	COPE action plan identified various areas requiring attention in the next reporting period to ensure birth preparedness at household level.
3. Facilitate Home Based Life Savings Skills (HBLSS) training for TBAs and CHCs	**Not yet started:** To be initiated in Year 3	
4. Co-ordinate the set up of a community based CHC referral system.	**Initiated, activity not yet on target:** Setting up of community based referral system progress in 54 villages.	
Quality and Access to Health Services 5. Facilitate training of PHU staff in appropriate presumptive treatment of malaria in pregnant women.	**Completed:** Training of PHU staff facilitated by UNICEF and MOHS.	
6. Facilitate training for PHU workers on quality obstetric care.	**Not yet started:** To be initiated in Year 3	
Cross-cutting 7. Community based verbal autopsy and disease surveillance.	**Not yet started:** To be initiated in Year 3	

The project baseline survey concluded that husbands play major roles in the choice of where a woman delivered her child. In light of this the project makes particular emphasis on male participation in health education on MNC and in community defined activities relating to MNC. CHC members developed and implemented MNC activities such as the construction of delivering huts for the traditional birth attendants in six villages, cleaning of the maternal section of PHUs and development of stand-by team to transport emergency referrals by hammock to the nearest PHU. The graph below depicts the levels of participation in community led MNC initiatives by gender. In most of the chiefdoms, male participation in activities relating to MNC was satisfactory except in Follosaba Dembelia. The cause of low male participation in Follosaba Dembelia could be attributed to males being preoccupied with the construction of the local secondary school during most of the period under review.



The bulk of activities under this intervention are scheduled for implementation in year three of the project.

4. Challenges impeding progress

The following were some of the constraints and challenges to project implementation during the reporting period.

- The project's principal partner, the Koinadugu District Health Management Team of the MOHS has undergone changes in leadership. Two District Medical Officers and the District Health nurse in charge of of public health activities in the district have been changed during the period under review. This has caused significant delays in project implementation owing to the time taken for incoming personnel to receive orientation with the district and to internalize the project process.

- A major strategy for the achievement of one of the project's objectives of health system strengthening is through Integrated Management of Childhood Illnesses (IMCI). The government of Sierra Leone has the primary role of developing comprehensive standard case management guidelines for the treatment of illnesses for IMCI to be operationalized. The MOHS planned to develop the IMCI guidelines in 2004. Guidelines are not yet complete and capacity building activities by CARE and DHMT for PHU staff on treatment using these guidelines are pending.

- The devolution of central government functions including health care delivery systems and management to the local District Council was completed in August 2005. The District Council is still working on the modalities for the devolution process to articulate specific functions of the district health management team (DHMT) and health related

NGOs in the district. This process has delayed the potential synergy that could be derived from joint implementation of health initiatives by local district council, the DHMT and CARE.

- The MOHS has made a change in first line malaria treatment from Chloroquine to combination therapy including artesenates. The transition process regarding the change in first line malaria treatment has not been smooth at the district level. There are evident questions and gaps in PHU and NGO staff understanding of the treatment protocol, managing side-effects of the drugs and interpreting the new policy on free treatment for malaria

Project Actions or Plans to Overcome Constraints

- The project in collaboration with the DHMT members and other health partners in the district is putting together a briefing and orientation document for the incoming District Medical Officer (DMO). This document will detail the plans and efforts of the health co-ordination team within the district. It is envisaged that this orientation packet will facilitate a more informed and rapid transition for the incoming DMO.

- IMCI treatment guidelines are available for PHU staff through the efforts of UNICEF. UNICEF facilitated training on malaria standard case management guidelines for PHU staff. More follow-up is required with the MOHS at the national level to ensure the rollout of IMCI to all the districts in Sierra Leone.

- The COPE assessment action plan details pertinent gaps to the delivery of quality health services by the Ministry of Health. The district council committee on health will be asked to initiate the co-ordination of the improvement of the management of health services in the district as per the locally developed plan of action.

- The project recommends that gaps identified in the administration of the new malaria treatment protocol be presented and addressed through the Malaria Working Group as this is the primary focus of the group.

5. Technical Assistance – Year 3

The midterm evaluation of the project is scheduled to take place in April and May 2006. The purpose of the mid-term evaluation is to assess the effects of CSP on the target population, specifically, to examine the relationship between the various program activities and the observed differences in beneficiary health status. The evaluation will outline what interventions were delivered and to what proportion of the target population in order to determine the reach of the potential effects. The overall goal is to gather credible evidence to answer whether the project is doing what it said it was going to do and to gain insight into how improvements can be made. Technical assistance will be required to plan, design and carry out the evaluation. The Draft terms of reference for the assignment are annexed to this report.

The project received Technical Assistance in March 2004 from the Child Survival Technical Support (CSTS+) Project, to undertake the Child Survival Sustainability Assessment (CSSA) from the DIP stage of the project. The IRC and CARE envisage acquiring technical assistance to facilitate the consolidation of reflections to date for the two Child Survival Projects.

6. Substantial Changes in the Project

No substantial changes from the DIP have been made.

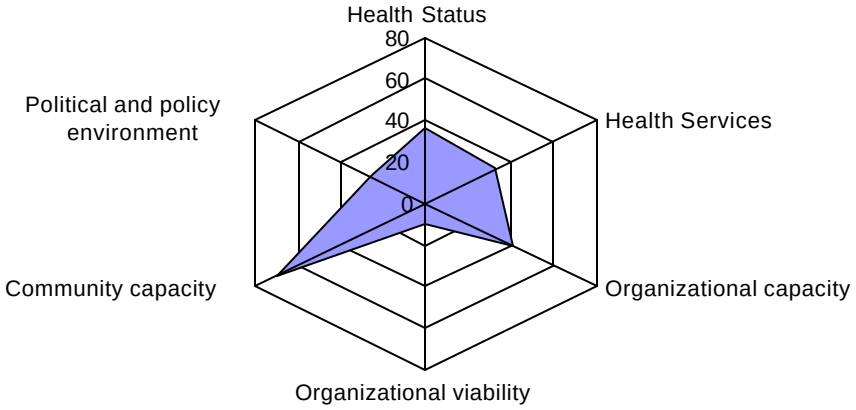
7. Sustainability

The CARE CSP, along with the IRC CSP in Kono district, were selected for Technical Assistance (TA) from the Child Survival Technical Support Project (CSTS+) to carry out the Child Survival Sustainability Assessment (CSSA). The assessment commenced with a visioning exercise that was conducted jointly for IRC and CARE in March 2004. Staff from the two projects, along with their respective MOHS district counterparts came together for a three-day Working Group meeting held March 29-31in Freetown. The CARE project has since completed the mapping of its indicators of sustainability.

Sustainability Dashboard

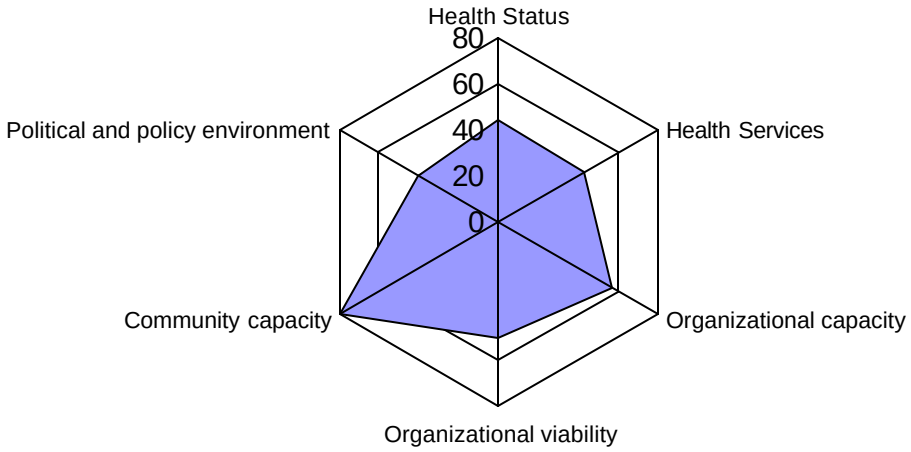
A map of CARE's CSP situation on a six-component sustainability 'Dashboard' is depicted below. The Dashboard depicts the status of indicators of sustainability. Theoretically, a context where health outcomes are sustainable is one where all the indicators equal 100%. Clearly organisational viability and capacity are low and service quality is critically lagging in Koinadugu.

Graph 3 : CARE Child Survival Project in Sierra Sustainability Dashboard 2005



The second dashboard below depicts the project's targets for the various indicators for sustainability. This is a reflection of how far the project implementing its current plan of activities will move towards its vision. These results are a combination of the project and the local system's planned effort measured in the six components.

Graph 4: CARE Child Survival Project in Sierra Leone
Sustainability Dashboard (Target for 2008)



During the Mid-term Evaluation, the team will focus on sustainability issues, amongst others, to gain insight into how the project can work with the MOHS and other partners to better move toward the sustainability targets shown above.

Project Exit Strategy

The project consistently reflects on the sustainability of health outcomes within the context of the six components. While it is envisaged that a comprehensive exit strategy will be developed with multiple-stakeholders during the period under review, a change in leadership at the level of the district health management team as well as the formation of the health sub-committee has necessitated a delay in the process to ensure the buy-in of new management. Within year three of the project, a multi-stakeholder workshop will be conducted to discuss the progress of the project and to further refine activities within the project's scope in order to improve the sustainability of health outcomes.

8. Programs Management System

8.1 Financial Management System

Match Funding

Adequate match funding required for project implementation during the reporting period was generated. In annex, please find a table illustrating match funds generated.

Country Office Expenditure Report

Salaries and Benefits

The Country Director, Assistant Country Director, Administrative and Finance Coordinator, Health Sector Coordinator and Project Manager are the international staff being paid for by the project. National and International staff salaries were expended according to planned budget.

Travel

The project covered the expenses of international travel to the CORE Epi-Info training workshop in Uganda and to Malawi for the CARE's Child Survival Annual meeting in July 2005.

Supplies

The project procured a desktop and three printers for project staff. Funds were spent on the following project activities;

- Training supplies
- Project workshops
- Stationery and office supplies
- Assessment of partners, including the Institutional Strengths Assessment of the Christian Extension Services and the Quality of Care Assessment with the MOHS

Expenditures are projected for the following supplies in the third year of the project:

- PHU medical supplies
- BCC material development
- Supplies to support partners

Contractual

CARE Sierra Leone obtained the services of technical assistant for Quality of Care assessment with the MOHS.

Others

Expenditure on fuel, vehicle repairs and maintenance were spent according to the allocated budget lines.

8.2 Human Resources

The project continued to receive technical backstopping from the CARE USA Health team based in Atlanta and the CARE Sierra Leone Country Office senior management team. The Health Sector Coordinator, until her departure for another assignment in July 2005, was based in Freetown and paid frequent field visits to the project locations. Technical support in the areas of administration and financial management of the programme was received from the project backstop and this contributed to the successful implementation of quality programming.

The Project Manager, assisted by the Assistant Project Manager continued to effectively manage the affairs of the project on daily basis. Staff include; Monitoring and Evaluation Officer, Health Education Officer, Health Supervisors (2), Community Health Mobilizers (5), Drivers (2), Radio operator and office cleaner.

Hiring and orientation of project staff is complete and ongoing capacity efforts of project staff for timely implementation of planned activities is in progress.

8.3 Communication Systems and Team Development

The project emphasized the development of staff to ensure the quality programming of Child Survival activities.

During the reporting year, the Monitoring and Evaluation Officer attended a training workshop on data collection, entry and analyses using EPI info data entry techniques in Uganda, organized by the CORE group. The M&E officer in turn facilitated training for other Country Office Monitoring and Evaluation Officers on the same.

The Project and Assistant Project Managers attended the annual child survival meeting in Malawi, organized by the CARE Health team in Atlanta. The workshop provided a unique opportunity for Child Survival programme staff in other countries to share implementation experiences and technical information.

Staff also participated in workshops that include the following:

- Community mobilization for development
- Positive Deviance (PD) using the PD Hearth model – organized by CRS
- Development of key messages for specific targets on Vitamin A supplementation and intake of Iodized salt – organized by HKI
- Ethical decision making in programming
- Strategic planning for middle and senior level staff
- Effective and supportive supervision

CARE Sierra Leone strongly focuses on building the capacity of national staff to manage complex project issues. In this view, workshops were organized on CARE programming Principles including the Rights Based Approaches (RBA), Household Livelihood Security (HLS) and Gender Equity and Development. Project staff actively participated in these workshops.

The CARE Academy operated by CARE USA also provides an opportunity for staff to pursue academic courses related to humanitarian and development work. During the reporting year CSP staff enrolled in the Academy to pursue courses ranging from project implementation standards to human resource management.

The availability of electronic communication to staff at the base level has also provided a boost to staff capacity building efforts. Staff now has the opportunity to browse technical sites through the Internet and download relevant materials from other health projects.

8.4 Local Partner Relationship

CARE has maintained a positive relationship with participating partners in the project and has ensured communication and collaboration with partners at all times.

8.5 Coordination and Collaboration in Country

CARE Sierra Leone has actively coordinated project activities with MOHS and other health related NGOs in the country in general and the district in particular.

At district level, project staff have participated in district level coordination meetings organized by the DHMT and the National Commission for Social Action (NACSA) to discuss project activities including implementation strategies. The project is working with the DHMT, the health committee of the local council and other NGOs to rejuvenate the district level malaria-working group to coordinate the activities of malaria programmes.

At national level, CARE Sierra Leone participates in MOHS health task force meetings and working groups (e.g., malaria, nutrition). CARE also has a partnership agreement and collaborates with UNICEF in malaria prevention initiatives. The CARE CS project constantly collaborates with IRC's CSP in the sharing and exchange of information and innovations in health.

8.6 Organizational Capacity Assessment

CARE Sierra Leone has just undergone an A-133 audit. The preliminary report suggests that there will be no disallowed costs or critical findings.

9. Plans For Year 3 (October 2005 to September 2006)

Project Work plan		Year 3				Year 4				Year 5				Personnel	
Major Activities	**Activity Focus***	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**Who at CARE?**	**Who (Other)?**
Objective 1: **Strengthened family and household knowledge and decision-making skills related to health of women and children resulting in the practice of positive behaviors to improve maternal and child health and prevent, recognize and manage common diseases.**															
Implementation of health promotion/education campaign through CHCs targeting HH knowledge, beliefs and practices.	BC	x	x	x	x	x	x	x	x	x	x	x		CHM, CHS	DHMT, Community
Conduct training needs assessment (TNA) for community-based organizations, local partner organizations and MOHS and CARE staff.	Q and A													HSC, PM, HEO	DHMT
Training of PHU staff, and health club members to implement BCC strategy to HH members of community resulting in decrease in harmful practices; increase in practice of beneficial preventive practices; improved recognition of danger signs; and increase in appropriate care-seeking behavior.	Q and BC	x	x	x	x									CHS, CHM, APM, HSC, PM	DHMT
Objective 2: Improved quality and accessibility of services provided by MOHS personnel and MOHS extension services															
Promote dialogue between communities and DHO/PHUs.	Q	x	x	x	x	x	x	x	x					CHM, CHS, APM, PM	PHU staff, DMO, WC
Facilitate initial and refresher IMCI training.	Q		x				x				x			PM, APM	DHMT
Conduct quarterly quality assurance (QA) workshops for PHU staff.	Q	x	x	x										PM, APM	DHMT
Work with DHO to identify and prioritize problems in district health services (including HMIS) and design and implement solutions that are based on qualitative and quantitative data.	Q	x	x	x	x	x	x	x	x					PM, APM, M&E	DMO, DHS, M&E, PHU staff
Conduct training needs assessment (TNA) for community-based organizations, local partner organizations and MOHS staff.	Q	x				x				x				HSC, PM, APM, HEO	DHMT
Work with partners (UNICEF, MOHS) to develop strategy/plan for ensuring supply of essential drugs in PHUs to support IMCI.	A					x	x	x	x					HSC, PM, APM	DHMT

Conduct ongoing monitoring of CS Project results in collaboration with DHO/PHU colleagues and feed results back into project including the use of LQAS.	Q	X	X	X	X	X	X	X	X	X	X	X	X	PM, M&E, APM, CHS, CHM, HEO	PHU staff, M&E, DHMT
Objective 3: Enhanced community capacity to form groups and institutions that sustain health initiatives, demonstrate social cohesion, and promote good governance mechanisms															
Assist well-run CHCs to identify needs of their organization and provide TA to build their capacity.	BC	X	X	X	X	X	X	X	X					CHS, CHM, APM, PM, HEO	DHMT
Facilitate the formation and training of Community based growth promotion groups emerging from CHCs.	A	X	X	X	X										
Collaborate with communities in a participative evaluation of their own efforts.	BC	X	X	X	X	X	X	X	X	X	X	X	X	CHS, CHM, APM, M&E	DHMT
Assist communities and CHCs to access multi-sectoral development opportunities to improve communities.	A	X	X	X	X	X	X	X	X	X	X	X		CHS, APM, PM, HSC	PHU staff, DHMT
Objective 4: Ensured sustainability of the activities and achievements on the project															
Facilitate cross visits for DHO/community leaders from Koinadugu, Kono and Kailahun districts.	BC	X	X	X	X	X	X	X	X	X	X	X	X	PM, APM	DHMT
Community, District and national level monthly, quarterly and annual collaboration on issues pertaining to CS, Malaria, Nutrition, Maternal and Newborn Care (MNC) and EPI.	BC	X	X	X	X	X	X	X	X	X	X	X	X	PM, APM, CHS, CHM, HEO	PHU staff, VDC members, DHMT
Provide TA for organizational development and capacity building.	Q	X	X	X	X									Consultants, HSC, PM, APM	DHMT, PHU staff
Create opportunities for partner organizations to develop inter-organizational links, access to information and assistance, and accountability.	Q	X	X	X	X	X	X	X	X	X	X	X	X	PM, APM, HSC	
Advocate for opportunities for partners to achieve or work towards financial viability.	Q	X	X	X	X	X	X	X	X	X	X	X	X	HSC, PM	DHMT
Support the planning process for the re-establishment of the District Medical Store.	A			X	X									HSC, PM, APM	DHMT

- **The activity addresses A=Access, BC=Behavior Change, or Q=Quality**

For Di Pikin Dem Wel Bodi
The Health of the Child Project
FY2003-FY2008

Lot Quality Assurance Sampling Survey
Koinadugu District

April 2005

CARE International in Sierra Leone
Koinadugu District, Sierra Leone

Acknowledgement

The child survival project staff would like to thank the communities of Follosaba Dembelia, Dembelia Sinkunia, Neini and Wara Wara Yagala chiefdoms where the Lot Quality Assurance Sampling (LQAS) survey took place. Without their patience, responses and warm hospitality the survey would not have been nearly as successful.

The project field agents and supervisors who served as enumerators are acknowledged for their dedication and hard work in ensuring data collection and analysis was effectively carried out.

Thank you.

Table of contents

Tables and Figures

Tables

Figures

1. EXECUTIVE SUMMARY

After three decades of poor governance exacerbated by eleven years of civil war, the economy, health and social infrastructure of Sierra Leone have been decimated with an estimated 68% of the population living below the poverty line. Sierra Leone has the lowest gross domestic product (GDP) per capita ($470) and life expectancy rates (34.5 years) in the world. Having ranked at the lowest level of the UNDP Human Development Index for the past decade, the level of poverty in Sierra Leone is staggering.

CARE International's Child Survival Project (CSP) is implemented in the northern part of Sierra Leone. The overall goal of the project is to improve the health status of women of childbearing age (15-49 years) and children less than five years in Koinadugu district.

The project is implementing four interventions through the Community Integrated Management of Childhood Illnesses (C-IMCI) strategy: immunisation, Nutrition, Malaria and Maternal and Newborn Care. Currently only immunisation, nutrition and malaria interventions are being implemented. Activities on maternal and newborn care have commenced but will be intensified during the third year of the project.

In this Lot Quality Assurance Sampling Survey to monitor the project's progress, the sampling frame was constructed using village level population data from the five chiefdoms where CARE is currently operating. CARE field officers collected population data from villages in the five chiefdoms. 19 households from each chiefdom were randomly selected. The probability of selecting a household in a community was proportional to the community's population size.

Overall coverage rates for the Lot Quality Assurance Sampling Survey were as follows:

- 32.7% of the children aged 0-5 months were exclusively breastfed during the last 24 hours.
- 62.5% of children aged 0-23 months were breastfed within the first hour after birth
- 22.6% of children aged 0-23 months had births that were attended by skilled health personnel
- 57.7% of mothers of children aged 0-23 months knew at least two symptoms that indicate the need to seek referral for emergency obstetric care
- 20.4% of mothers were able to report at least two neonatal danger signs
- 18.6% of children aged 0-23 months slept under an ITN the previous night
- 81.0% of mothers of children aged 0-23 months know at least two signs of childhood illness that indicate the need for treatment
- 23.3% of sick children aged 0-23 months had received increased food during diarrhoea episode in the past two weeks
- 62.1% of mothers with children aged 0-23 months had ever heard about an illness called AIDS.

The child survival project is utilising the findings from the LQAS to establish priorities for the next project year. Health outcomes priorities will be targeted at particular supervision areas that have demonstrated particularly low coverage rates.

2. BACKGROUND

After three decades of poor governance exacerbated by eleven years of civil war, the economy, health and social infrastructure of Sierra Leone have been decimated with an estimated 68% of the population living below the poverty line. Sierra Leone has the lowest gross domestic product (GDP) per capita ($470) and life expectancy rates (34.5 years) in the world. Having ranked at the lowest level of the UNDP Human Development Index for the past decade, the level of poverty in Sierra Leone is staggering.

The Child Survival Project (CSP) is implemented in five chiefdoms of Koinadugu District in Sierra Leone. The goal of the child survival project is to improve the health status of children under five and women of reproductive age (15-49 years). The project has an estimated 48,630 children under five and 51,491 women aged 15-49 as direct beneficiaries. Secondary beneficiaries include women and children residing in the remaining six chiefdoms who utilize the health units in CSP operational area.

The project is implementing four interventions through the Community Integrated Management of Childhood Illnesses (C-IMCI) strategy: EPI (15%), Nutrition (20%), and Malaria (35%) and Maternal and Newborn Care (30%). Currently only EPI, Nutrition and Malaria are being implemented. Activities on Maternal and Newborn Care will start during the third year of the project cycle (April 2006). Project implementation commenced with a baseline survey conducted in February 2004.

Capacity building of institutions, both community and district level as well as partners is a key project approach towards improving health services in the target areas.Working closely with implementing partners such as the District level Ministry of Health and Sanitation, the local radio station, Radio Bintumani, Community Health Clubs (CHCs) and Christian Extension Services (CES), training, organizational diagnosis activities and developing participatory plans of action have all been conducted at various levels within these institutions.

Behaviour Change Communication (BCC) activities are centred around 56 community health clubs (CHCs) community. The purpose of CHCs is to raise community awareness on health issues in an effort to prevent disease, improve home management of diseases, improve care-seeking practices among caretakers as well as other household members and encourage participation in other project activities. Membership into the clubs was voluntary. Clubs met once a week to discuss health related topics. A CARE field agent facilitated these health sessions. There are a total of 25 health topics in the current CHC curriculum. After completion of all topics CHC members received certificates. Usually all community members attend the certificate ceremonies. These ceremonies also serve to influence additional participation by other community members.

Other project related activities include strengthening the health systems in collaboration with the district level Ministry of Health and Sanitation (MOHS). This is being done through the integrated management of childhood illnesses (IMCI) approach. Additionally, to assess the current quality of health services from a client perspective CARE undertook a Client Oriented Provider Efficient (COPE) study. The results of this study have led to the development of a comprehensive action plan for the improvement of the quality of health care services within the district as well as identifying a system for peer feedback.

3. PROCESSES AND PARTNERSHIP BUILDING

Community-based organizations (CBOs) and the MOHS play pivotal roles in the implementation of project activities. While the District health staff were unable to participate in the implementation of the LQAS, the results will be shared with them as part of a feedback process to initiate reflection on some of the interventions that they have implemented in the project area.

4. SURVEY METHODOLOGY

What is Lot Quality Assurance Sampling (LQAS)?

The Child Survival Project in Sierra Leone decided to use the Lot Quality Assurance Sampling (LQAS) approach as part of its impact monitoring. The project recognizes the influence of certain confounders (external factors) that affect any maternal and child health outcomes. Those factors are not very responsive to short-term intervention. More specifically, it is very hard to change long-standing and deeply rooted cultural or religious practices within a 5-year period—the time frame for the CSP to implement activities and demonstrate program effectiveness. Instead, there is a focus on factors that can more likely change, such as health worker performance. The concepts of "lots[2]" and "production units[3]" are important in LQAS. With LQAS, you divide the population into service delivery areas or program management units. These subdivisions serve as lots (strata) in LQAS. Common strata or lots for LQAS are health facility catchment areas or project or MOH supervision areas. The production unit is usually a health worker or a team of health workers and possibly their clients. Essentially, LQAS in simple terms is just random sampling within service delivery areas (lots).

- The LQAS allows the project to draw comparisons between subdivisions of a population. However, the main objective of this LQAS was not to obtain individual estimates from those subdivisions, but rather to base program management decisions using a *binomial* principle. Binomial means that there are only two possible answers or outcomes (for example, yes or no; high or low). In other words, with LQAS, we are not determining the level of coverage in each subdivision. Instead, we are determining whether coverage in each subdivision is one of two things: a) at or above expectation, or b) below expectation.

[2] *Lot:* In health applications of LQAS, lots tend to be supervision areas or catchment areas of health facilities. Each lot usually consists of several villages or communities.

[3] *Production unit:* From a health perspective, the production unit is usually a health worker or a team of health workers within each lot. In other words, it is an implementation unit in your project.

Survey area

Koinadugu District is divided into 11 Chiefdoms, of which CARE CSP is working intensively in five, covering fifty-six communities. The chiefdoms represent a demarcation of traditional land by Paramount Chiefs[4]. Chiefdoms are further broken down into sections, which are a smaller administrative classification, again demarcated by local chiefs/traditional authorities. This traditional system is wholly recognized and supported by the central government. All government related services (i.e. education, health etc.) are organized and administered from the district capital of Kabala. Each Chiefdom has a headquarter town (large village) which administratively oversees social services within its chiefdom.

The project's target chiefdoms include: Wara Wara Yagala, Sengbeh, Folosaba Dembellia, Dembellia Sinkunia and Neini.. Project field agents prior to the survey collected community population data from each of the 56 communities. These figures were used as basis to determine the selected areas for the LQAS.

Study Population

Any household with a mother and child between the ages of 0-23 months were considered a survey household. The total sample size was 95 mothers with children 0-23 months old. Once the survey team confirmed the age of the child, the mother or caretaker was interviewed. In an event where the survey team came upon a household with more than one child within 0-23 months of age, the youngest child was selected for the study. If there was no child in a particular household the next closest household was taken until the required number of respondents for that community was completed.

Questionnaire (Interview schedule)

The same questionnaire as the baseline survey was used with a few modifications. The water and sanitation section was removed as this is not a core component of the project (It was included in the original baseline for another project that has since ended). Additionally the anthropometric section was not included even though nutrition is a core component of the project. This decision was made because of the need to focus on health worker service delivery. Moreover, nutrition data will be collected and analysed on a monthly basis with the commencement of Community Based Growth Promotion (CBGP) in the project area.

Modifications in the HIV/AIDS and breastfeeding sections were made to ensure that they captured recommendations from revisions to the KPC manual, recently published by Child Survival Technical Support (CSTS+).

A total of three days was spent training enumerators on the questionnaire. This included pilot testing the questionnaire in the field and making necessary revisions during the training. Four teams each team consisting of two enumerators were assigned to a chiefdom (i.e. Wara Wara Yagala, Sengbeh, Follosaba Dembelia and Dembelia Sinkunia). Neini chiefdom, however, is the most remote and difficult to access operational chiefdom. For this reason it was surveyed separately using all the teams at one time.

[4] A Paramount Chief is considered both the traditional leader of the geographical area as well as being recognized by Government.

Sample selection

4.3.1 Step One- Sampling communities within each chiefdom

19 households from each chiefdom were randomly selected. The probability of selecting a household in a community was proportional to the community's population size. A sampling frame served as a guide for selecting communities. A sampling frame is a listing of all the communities within the chiefdom, which includes each community's population size, and the cumulative population of the chiefdom. This served as a guide for selecting how many households in a community were to be interviewed.

A sampling size was calculated by dividing the total population of the chiefdom by 19 (the LQAS recommended sample size). Then a number between one and the sampling interval was randomly selected. The community whose population included the randomly selected number was taken as the first LQAS community. Adding the sampling interval to the randomly selected number identified the second community. This process was repeated until the required 19 households were selected. For example the total population for Wara Wara Yagala was 3,088, the sampling interval was obtained by dividing 3,088/19=(163). A number was randomly chosen between 1 and 163, which was 52, the community whose cumulative population included the random number 52 (Kamajimbo) was selected. Then the sampling interval of 163 was added to 52, which was 215 which also fell into Kamajimbo. The other communities in this chiefdom were selected by continuously adding 163 to the cumulative population of the previously selected community until the 19 households were selected. See annex 7.1 for the five chiefdoms and their studied communities.

4.3.2 Step two- sampling households within each selected community

Once survey communities were identified in each chiefdom, it was necessary to further identify the entry points within those communities. To facilitate entry points and household selection, village participants and/or field officers working in the area drew up detailed maps. Four potential entry points into each village were identified. One final entry point was randomly selected from the four.

Teams were trained to begin the survey at the nearest house to the randomly selected entry point for each village. Upon completion of this initial household survey the teams were instructed to proceed to the next closest house until the required number of questionnaires were administered. Only households with a child less than 24 months were included in this survey.

Data collection

Four teams of two people each were used for the LQAS. A total of fives days were needed to collect data from all survey villages. Two days were spent collecting data from the easily accessible chiefdoms: Wara Wara Yagala, Sengbeh, Folosaba Dembellia and Dembellia chiefdoms. Three days were needed to collect data in Neini chiefdom due to bad roads and isolated villages.

Data Management and Analysis

The Assistant Project Manager reviewed data before tabulation was done. Six project staff participated in the manual tabulation of collected data. It took three days to manually tabulate all the data. This report represents the findings from the five CSP operational chiefdoms.

5. RESULTS

Supervision Areas (SA) and core intervention areas

A supervision area is defined by LQAS as an operational chiefdom supervised by one project field agent. There are five community health mobilizers charged with the responsibility of overseeing project field activities within the communities and the Peripheral Health Units (PHUs) that fall within their supervision area. In all the five operational chiefdoms, the CSP is working with 21 PHUs. Two community health field supervisors supervise these community health mobilizers.

Nutrition and feeding practices

The findings in table 1 below signify that Wara Wara Yagala chiefdom is below the other chiefdoms in terms of performance on the key indicator of exclusive breast-feeding. The high results in the vitamin A indicator could be a result of the recently conducted national Vitamin campaign by the MOHS.

Table 1
Nutrition and feeding practices by supervision areas

Indicator	Neini	Sengbeh	Wara Wara Yagala	Follosaba Dembelia	Dembelia Sinkunia
Percent of children aged 0-23 months who were breastfed within the first hour after birth.	76.9%	90.0%	28.6%	41.2%	54.5%
% of children aged 0-5 months who were exclusively breastfed during the last 24 hours.	30.0%	50.0%	0%	40.0%	33.3%
% of children aged 6-23 months who received a high dose of vitamin A supplement during the last six months.	60.0%	92.9%	71.4%	87.5%	50.0%
% of children 6-59 months who received deworming medication during the last 6 months	30.0%	50.0%	14.3%	12.5%	60.0%

Program management needs to look at what health workers are doing in Sengbeh with breastfeeding as that particular chiefdom is performing better than other target areas. Follosaba Dembelia is also performing well in the exclusively breastfed intervention area. Sengbeh clearly had the best coverage during the last Vitamin A distribution sponsored by the MOHS. Greater efforts should be made to increase Vitamin A access to other chiefdoms during the next campaign.

Maternal and newborn care

Major activities related to this intervention area will not begin until the third year of the project (starting October 2005). However, there has been a number of community sensitisation activities around this topic in the community health clubs, perhaps these informal sessions are related to

some unexpected results below such as high iron supplementation for pregnant women and knowledge of neonatal danger signs.

Table 2
Maternal and newborn care indicators by supervision areas

Indicator	Neini	Sengbeh	Wara Wara Yagala	Follosaba Dembelia	Dembelia Sinkunia
% of women aged 15-49 who know at least two symptoms that indicate the need to seek referral for emergency obstetric care	52.6%	57.9%	57.9%	73.7%	47.4%
% of children aged 0-23 months whose births were attended by skilled health personnel. (Includes doctor, nurse, MCHA) TBAs were not considered skilled	15.8%	21.1%	10.5%	26.3%	42.1%
% of mothers able to report at least two neonatal danger signs.	84.2%	89.5%	94.7%	68.4%	68.4%
% of mothers who received/ bought >= 90 iron supplements while pregnant with the youngest child less than 24 months.	84.2%	94.7%	84.2%	94.7%	78.9%
% of mothers who received a vitamin A dose during the first two months after delivery	36.8%	78.9%	52.6%	63.2%	31.6%
% of mothers who received deworming medication during the second or third trimester of a pregnancy within the last two years.	31.6%	47.4%	31.6%	26.3%	31.6%

Sengbeh consistently has better coverage in all areas, particularly when one looks at the coverage for nutrition and feeding practices and maternal and newborn care together. There is a large gap between supervision areas with regard to birthing with Wara Wara Yagala not performing well and Neini Chiefdom just marginally better. Post-partum Vitamin A distribution is low in all SAs probably due to the low number of mothers whose children were delivered by skilled health personnel, who usually provide Vitamin A.

Expanded programme on immunization (EPI)

There is such disparity within and across chiefdoms, with the exception of Sengbeh, it is difficult to fully understand what is going on with regards to EPI programming and access to vaccines as well as outreach activities. Clearly PHUs in Follosaba Dembelia and Neini provide better vaccination coverage probably with more outreach activities being implemented there.

Table 3
EPI indicators by supervision areas

Indicator	Neini	Sengbeh	Wara Wara Yagala	Folosaba Dembelia	Dembelia Sinkunia
% of mothers with children aged 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child less than 24 months of age.	26.3%	31.6%	15.8%	15.8%	57.9%
% of children aged 12 – 23 months who are fully vaccinated (against the five vaccine-preventable diseases) before first birthday.	71.4%	33.3%	0%	100%	25.0%
% of children aged 12-23 months who received a measles vaccine.	71.4%	66.7%	100%	40%	70.5%

The low figures of fully immunised children in Wara Wara Yagala chiefdom are unacceptable. Not one child is fully immunized. This could be due to poor health worker performance, which would be consistent with the other intervention areas' results thus far, or access to vaccines and knowledge of the importance of preventing the diseases associated with the EPI program

Malaria

The results for malaria are not surprising. Sierra Leone is currently changing the protocol for treatment of malaria from Chloroquine to ACT (Artemisinin Combination Therapy). In order to be able to measure effectiveness in the future the survey analysis used ACT as the definition for effective treatment, even though it is not yet used consistently to treat a malaria diagnosis.

Table 4
Malaria indicators by supervision areas

Indicator	Neini	Sengbeh	Wara Wara Yagala	Follosaba Dembelia	Dembelia Sinkunia
% Of children aged 0–23 months who slept under an ITN the previous night.	0%	16.7%	50.0%	14.3%	0%
% of children aged 0-23 months with a febrile episode that ended during the last two weeks who were treated with an effective anti-malarial drug within 48 hours after the fever began.	0%	0%	0%	0%	0%

Insecticide Treated Nets (ITNs) are not commonly used in the district. This is clearly seen in the results. However, it should be noted that the question was only posed to mother's whose child had a febrile episode, and most likely not to have had a net. For the next LQAS this question will be asked to all mothers. Moreover, a recent distribution of free ITNs to first contact with pregnant women and children due for DPT 3 was conducted. This will greatly assist in improving indicators in this intervention area.

Mother's knowledge and practice

Mother's knowledge on key health topics is the first step towards behaviour change. From the results below Follosaba Dembelia is either not receiving information from the health workers or the community health clubs being implemented by the project are not nearly as active as the other chiefdoms. Increasing the fluid given to children during a diarrhoeal episode is clearly not being practised in all of the supervision areas.

Table 5
Mother's knowledge by supervision area

Indicator	Neini	Sengbeh	Wara Wara Yagala	Follosaba Dembelia	Dembelia Sinkunia
% of mothers of children aged 0–23 months who know at least two signs of childhood illness that indicate the need for treatment	84.2%	89.5%	94.7%	68.4%	68.4%
% of sick children aged 0-23 months who received increased fluids during diarrhoea episode in the past two weeks.	0%	22.0%	0%	0%	16.7%
% of sick children aged 0-23 months who received increased food during diarrhoea episode in the past two weeks.	20.0%	33.3%	16.7%	0%	50.0%
% of mothers with children aged 0-23 months who have ever heard about an illness called AIDS.	36.8%	42.1%	78.9%	57.9%	94.7%

Key Indicators

Table 6 below gives the overall coverage rates of the LQAS survey in the CSP operational communities and the PHU catchment area. It is critical to review the confidence limits when looking at the overall coverage. As can be seen they are quite wide.

Table 6
LQAS Key Indicators

Indicators	Overall True Coverage (Weighted)	Confidence Limits
Nutrition/Feeding practices Percent of children aged 0-23 months who were breastfed within the first hour after birth.	62.5% / n=65	53.6% - 71.4%
% of children aged 0-5 months who were exclusively breastfed during the last 24 hours.	32.7% / n=37	23.2% - 42.2%
% of children aged 6-23 months who received a high dose of vitamin A supplement during the last six months.	72.2% / n=56	63.4% - 81%
% of children 6-59 months who received deworming medication during the last 6 months	33.6% / n=56	24.4% - 42.8%
Maternal and Newborn Care % of women aged 15-49 who know at least two symptoms that indicate the need to seek referral for emergency obstetric care	57.7% / n=95	47.5% - 67.9%
% of children aged 0-23 months whose births were attended by skilled health personnel. (Includes doctor, nurse, MCHA) TBAs were not considered skilled	22.6% / n=95	14.2% - 31%
% of mothers able to report at least two childhood danger signs.	81.0% / n=95	73.1% - 88.9%
% of mothers who received/ bought >= 90 iron supplements while pregnant with the youngest child less than 24 months.	87.6% / n=95	80.8% - 94.4%
% of mothers who received a vitamin A dose during the first two months after delivery	52.1% / n=95	42.4% - 61.8%
% of mothers who received deworming medication during the second or third trimester of a pregnancy within the last two years.	33.8% / n=95	24.0% - 43.6%
% of mothers who took anti-malarial medicine to prevent malaria during pregnancy	55.5% / n=43	45.3% - 65.7%
EPI % of mothers with children aged 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child less than 24 months of age.	29.1% / n=95	20.0% - 38.2%
% of children aged 12 – 23 months who are fully vaccinated (against the five vaccine-preventable diseases) before first birthday.	51.9% / n=26	43.8% - 60%
% of children aged 12-23 months who received a measles vaccine.	68.6% / n=33	59.4% - 77.8%
Malaria % of children aged 0–23 months who slept under an ITN the previous night.	18.6% / n=32	7.4% - 18.6%
% of children aged 0-23 months with a febrile episode that ended during the last two weeks who were treated with an effective anti-malarial drug within 48 hours after the fever began.	0% / n=23	0%
Knowledge % of sick children aged 0-23 months who received increased fluids during diarrhoea episode in the past two weeks.	7.4% / n=28	2.6% - 12.2%
% of sick children aged 0-23 months who received increased food during diarrhoea episode in the past two weeks.	23.3% / n=28	15.1% - 31.5%
% of mothers with children aged 0-23 months who have ever heard about an illness called AIDS.	62.1% / n=95	52.3% - 71.9%

Socio-demographic characteristics

In the survey, 97.4% respondents were married. Of the 95 respondents, 23.2% had more than six live births. Among the live children born, 41.1% had lost 1 or more children. Table 7 below presents a summary of the socio-demographic information.

Table 7
Marriage and live births
N=95

Indicator	Frequency	Percent True Coverage
Married women	93	97.4%
Mothers with children 0-23 months with live births where all children currently alive.	56	58.4%
Mothers 0-23 months who experienced less than two deaths of the children they gave birth to.	50	51.0%

Economic Status

Only 35.4% of the respondents are living in "good-housing" (houses with either mud or cement brick and iron sheet roofing); implying that most houses are made of mud bricks and thatch roof. In the study, 44% of mothers of children 0-23 months of age had tape recorders and 55.4% had radios in their homes. Wood is used as the domestic fuel for cooking in all households.

Table 8 shows the economic status of surveyed households. Many of the respondents do not own any cattle or even smaller domestic animals like goats, sheep or chicken.

Table 8
Households with livestock/back yard garden
N=95

Indicator	Frequency	Percent true coverage Yes
Chickens (four or more)	32	36.5
Sheep/goat (four or more)	15	13.2
Cattle	10	10.5
Back-yard garden	65	66.3

Immunization

Indicators:

- Percent of mothers with children aged 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child. ***LQAS 29.1%***
- Percent of children 12-23 months who are fully vaccinated before first birthday**.** ***LQAS 51.9%***
- Percent of children aged 12-23 months who received a measles vaccine. ***LQAS 68.67%***

73.6% of the respondents have immunization cards for their child 0-23 months old. The survey area had 92.5% EPI access indicating that EPI services are readily available within PHU and outreach sites in the supervision areas.

72.2% of children aged 6-23 months received a high dose of vitamin A supplement during the last six months. 33.5% of surveyed children had received de-worming medicine in the last six months before the survey. Out of the mothers of children 0-23 months that were interviewed, 87.6% indicated receiving iron supplementation tablets while they were pregnant with the youngest child 0-23 months and 52.1% said they received a dose of vitamin A capsules during the first two months after delivery. Table 9 indicates vaccination coverage rates. Polio at birth has very low rates due to the low numbers of births delivered by skilled personnel who often provide this vaccine immediately after delivery.

Table 9
Immunization verified by under five cards
N=72

Indicator	Frequency	Percent True Coverage Yes
BCG	55	96.0
Polio O (Polio given at birth)	15	24.8
Polio 1	60	82.5
Polio 2	43	62.0
Polio 3	27	35.0
DPT 1	58	78.1
DPT 2	42	59.0
DPT 3	27	35.2

Breastfeeding/Feeding Practices

Indicators:

- Percent of children aged 0-23 months who were breastfed within the first hour after birth. ***LQAS 62.5%***
- % of children aged 0–5 months who were exclusively breastfed during the last 24 hours. ***LQAS 32.7%***
- % of children aged 6-9 months who received breast milk and complementary foods during the last 24 hours. ***LQAS 83.3%***

Of 61 respondents, 96.7% indicated giving their youngest child 0-23 months hot water within the first three days after delivery, 37.8% gave milk and 32.9% gave fruit juice. Table 10 shows rates of continued breastfeeding. It is clear that prolonged breastfeeding up to the time a child is 24 months of age is prevalent.

Table 10
Continued Breastfeeding
N=61

Indicator	Frequency	Overall True Coverage Percent Yes
Continued breastfeeding 6-11 months	27	100%
Continued breastfeeding 12-17 months	18	100%
Continued breastfeeding 18-23 months	16	70.8%

Iodine has important implications to the health of mothers and children. Of the 95 mothers surveyed, 41.4% indicated using Iodized salt for cooking.

Diarrhoea

Indicators:

- Percent of children 0-23 months of age who have had diarrhoea in the past two weeks. ***LQAS 29.2%***
- Percent of children aged 0-23 months who received increased fluids and continued feeding during an episode of diarrhoea in the past two weeks. ***LQAS 7.4%***

Care seeking behaviours for the treatment of diarrhoea was 43.7%. Husbands play a significant role in decision-making process for the treatment of diarrhoea. In this survey 27.8% mothers reported that their husbands determined where they should go for the treatment of diarrhoea and 13% made the decision themselves. 2.7% of mothers stated that health workers contributed to the decision making on treatment of diarrhoea.

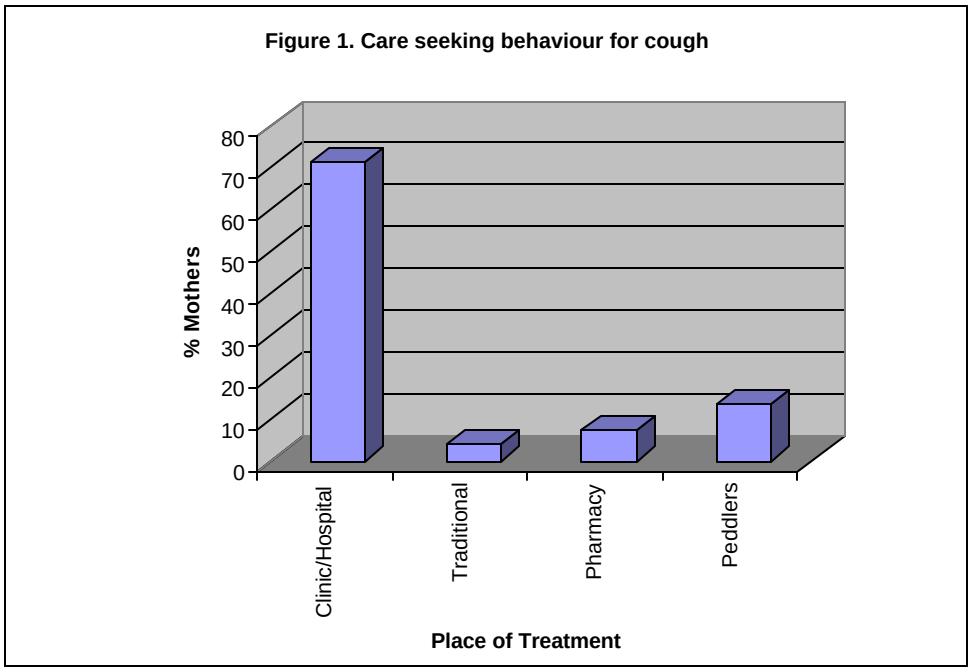
Second options for the treatment of diarrhoea were the district hospital/clinic (18.5%), pharmacy (5.5 %) and drug peddlers (2.2%). 82.7 % mothers indicated that they had heard about ORS, while only 19.9% of these mothers proved competency in preparing the ORS correctly. 46.6% mothers with children 0-23 months old had ever heard about Sugar and Salt Solution (SSS) and only 4.5% of them had knowledge on the preparation of the SSS.

Acute Respiratory Tract Infection (ARI)

Indicators:

- Percent of children 0-23 months of age who have had an illness with cough in the past two weeks. **LQAS 33.0%**
- Percent of children 0-23 months of age who had an illness with a cough in the past two weeks and trouble breathing. **LQAS 66.3%**
- Percent of mothers of children 0-23 months of age who sought treatment for the illness with a cough in the past two weeks. **LQAS 68.3%**

Mothers sought treatment for coughs either in the district hospital/clinic, traditional, pharmacy or with drug peddlers. Among the 20 respondents with children 0-23 months who had an illness with cough and sought treatment during the last two weeks before the survey, 10% had antibiotics administered for cough and 71.4% of these children were treated at a health facility. The figure below shows the care seeking behaviour for an illness with cough in the last two weeks before the survey. The majority of respondents utilised the health facility to treat coughs. Drug peddlers were reported to be playing a role in providing curative services.



Mothers of children 0-23 months of age and their husbands were equally responsible for the decision on where to take their child for treatment after the child had a respiratory infection. Other relatives had no influence in the decision making process for seeking treatment on ARI infection.

Malaria

Indicators:

- Percent of children aged 0-23 months who slept under an ITN the previous night. ***LQAS 18.6%***
- Percent of children with a febrile episode that ended during the last two weeks who were treated with an effective anti-malarial drug within 48 hours after the fever began. ***LQAS 0%***
- Percent of mothers who took anti-malarial medicine to prevent malaria during pregnancy. ***LQAS 55.5%***

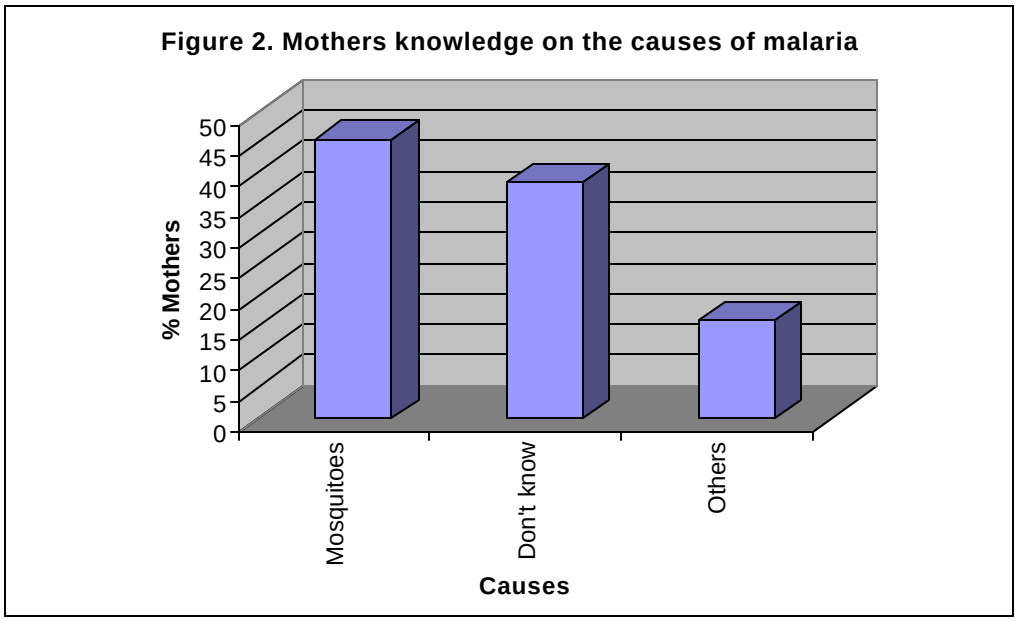
In Sierra Leone malaria (fever) is the highest reported illness in all health facilities. In the two-weeks preceding the survey febrile episodes were reported by 46.7% mothers of children 0-23 months of age. Among the children who had fever during the previous two weeks 55.8% of children 0-23 months had fever at the time of the survey. Of the children who had a febrile episode in the last two weeks 44.9% of their mothers sought treatment for this febrile episode.

Among the children who were taken for treatment 69.2% were treated at either the district hospital or clinics, 14.9% sought treatment with drug peddlers while 5.5% sought treatment at the pharmacy.

In June 2004, the government changed the treatment protocol for malaria from Chloroquine to a combined therapy (Artesunate and Amodiaquine) because of recent studies that indicated 60% resistance to Chloroquine. Even though Chloroquine is no longer recommended for treatment of malaria due to this resistance, at the time of the LQAS this new treatment protocol had not yet been implemented in Koinadugu district and none of the respondents reported being treated with either Artesunate only or Artesunate and Amodiaquine. Of the 21 children with febrile episode

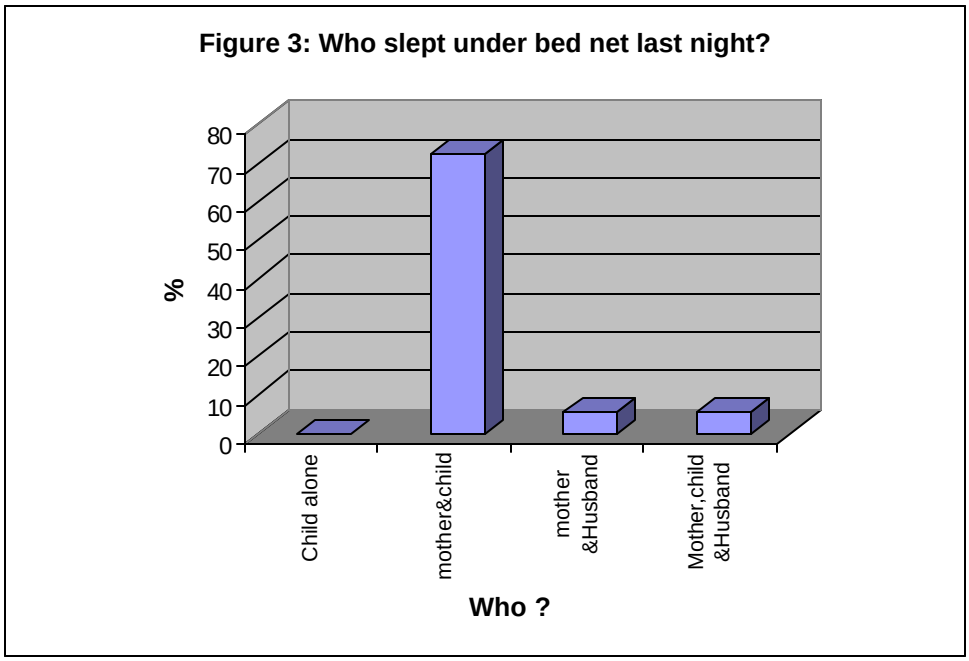
in the last two weeks preceding the survey 48.8% were treated with Chloroquine within 48 hours of the illness. 50.8% were treated with Panadol. The decision to seek treatment for the febrile episode was reported to have been made by the husband in 42.4% of cases and 54.8% by the mothers themselves.

The figure below illustrates mothers' knowledge on the causes of malaria. While most (51.4%) mothers of children aged 0-23 months understand that mosquitoes cause malaria, 36.1% of mothers do not know the cause of Malaria.



61.6% of mothers with children 0-23 who had fever during the two weeks preceding the survey sought treatment either the same or the next day the fever started.

The respondents whose children had a febrile episode, only 33.3% possessed bed nets. The figure below indicates that most of the users of the nets were mothers sleeping together with their children.



The new Intermittent Presumptive Treatment (IPT) protocol for pregnant women is yet to be commenced in Koinadugu. Chloroquine was still being utilised to prevent malaria during pregnancy. 55.5% of mothers of children 0-23 months received IPT during their last pregnancy. Of the respondents who received IPT, 31.8% of mothers indicated receiving Chloroquine as malaria prophylaxis when they were pregnant.

Maternal and Newborn Care

Indicators:

- Percent of children aged 0-23 months whose births were attended by skilled health personnel. ***LQAS 22.6%***
- Percent of mothers able to report at least two known neonatal danger signs**.** ***LQAS 20.4%***
- Percent of women who know at least two symptoms that indicate the need to seek referral for emergency obstetric care. ***LQAS 57.7%***
- Percent of who received /bought >=90 iron supplementation while they were pregnant with the youngest child 0-23 months old. ***LQAS 87.6%***
- Percent of mothers who received a Vitamin A dose during the first two months after delivery. ***LQAS 52.1%***
- Percent of mothers who received deworming medication during the second or third trimester of pregnancy within the last two years. ***LQAS 33.8%***
- Percent of mothers who took antimalarial medication to prevent malaria during pregnancy. ***LQAS 55.5%***

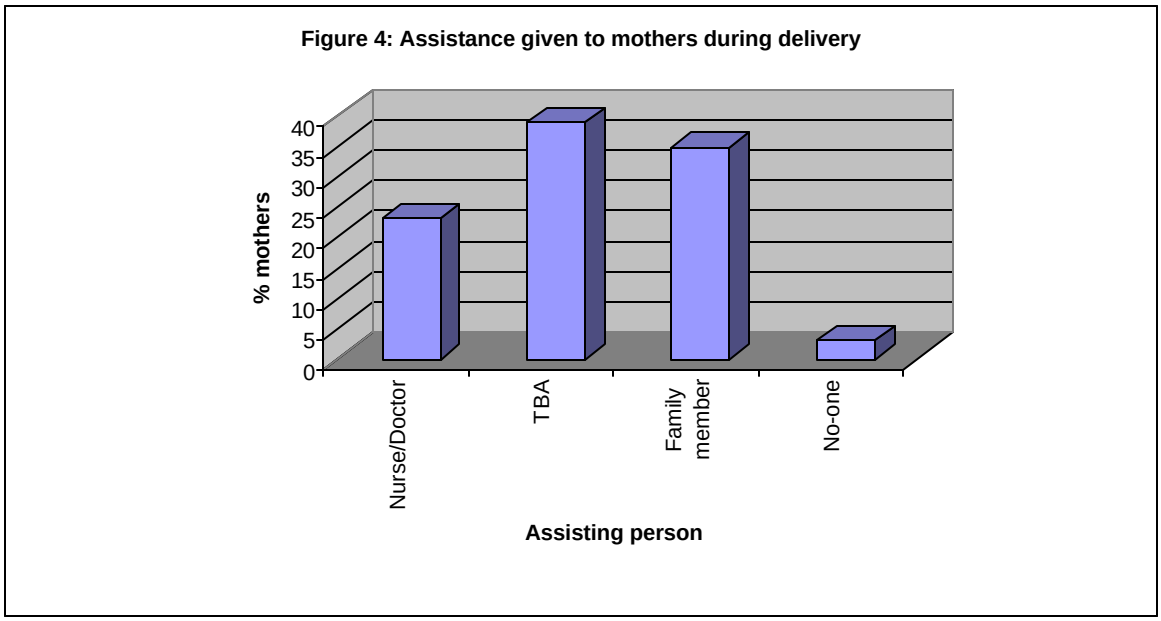
Of the 95 mothers surveyed, 89.4% said they consulted someone for antenatal care while they were pregnant with the child 0-23 months of age. Of these mothers only 57.5% possessed maternal antenatal care record cards. 82.2% of mothers who reported having maternal cards indicated that they had paid for them in cash or kind. Maternal cards are recommended for issue free to pregnant mothers.

Table 11 lists the places where mothers delivered their youngest child 0-23 months. The majority of women delivered in their homes.

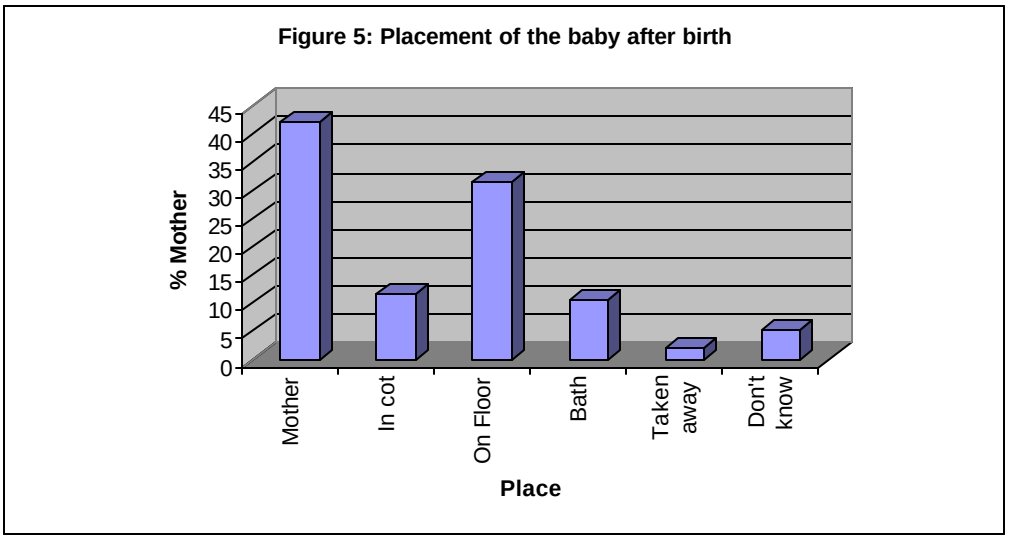
Table 11
Where mothers delivered
N=95

Indicator	Frequency	Percentage True Coverage
Home	66	70.2
Another home	12	11.3
Clinic	27	15.2
Hospital	2	1.8
Other place	1	1.5

Figure 4 below also shows the level of assistance given to mothers during delivery of their child 0-23 months old. Most of the respondents had the birth of their child aged 0-23 months assisted by a traditional birth attendant.



Of the 95 respondents, 69.7% reported clean cord care upon delivery. 40.5% of mothers of children 0-23 months of age had their babies placed with them immediately after birth. Figure 5 indicates where mothers reported having their children placed immediately after delivery. 31.5% of infants were placed on the floor immediately after birth.



Among the 95 respondents 25.8% initiated breast-feeding immediately after delivery, 30.8% had their babies bathed, 20.6% reported that left their babies to sleep. 19.4% reported that nothing was done to their baby and 2.7% did not know what was done to their babies.

Long distance between mothers' home and the nearest health facility is one of the major contributing factors for the low clinic attendance in Koinadugu district. In the LQAS survey, 94% of respondents live within 5 miles of the nearest health facility. Normally going to the health facility is primarily on foot for (99.3%) women. For 70.4% of respondents the time it takes to reach the nearest health facility is more than three hours.

Mothers who knew at least two symptoms that indicated the need to seek referral for emergency obstetric care were 57.7%. Encouragingly, 92.3% of mothers indicated the first place they would go for the management of emergency obstetric care would be the district hospital.

HIV/AIDS

Indicator:

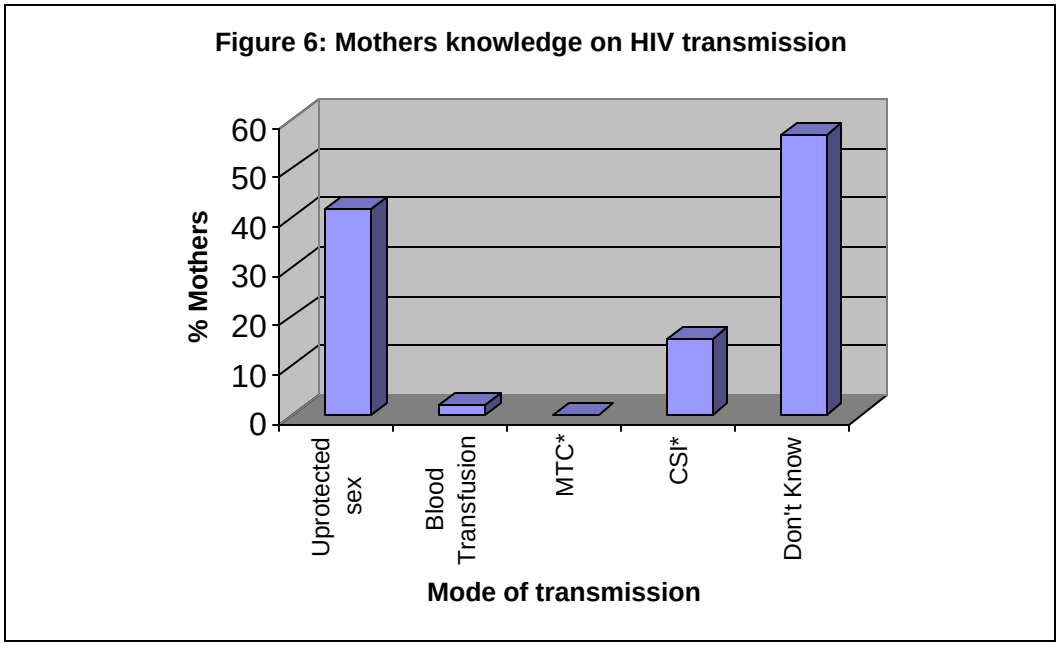
- Percent of mothers with children aged 0-23 months who have ever heard about an illness called AIDS. ***LQAS 62.1%***.

HIV/AIDS communication is conducted using music, concerts, television, radio, leaflets etc. Table 12 shows where the 62.1% of mothers who have every heard of HIV/AIDS obtained their information from. Radio appears to be the most powerful communication tool that most mothers listen to.

Table 12
Where mother heard about AIDS
N=59

Indicator	Frequency	Percent true coverage
Radio	35	65.9%
Health Centre	14	31.2%
Workshops	1	4.2%
Village Health Talks	7	2.7%
Handouts	0	0%
NGOs	12	21.9%
Family members	16	2.8%
Friends	21	40.8%
Other Sources	2	8.4%

Mothers who were aware of HV/AIDS have low knowledge rates for the modes of transmission of the disease. Figure 6 depicts mother's knowledge on the transmission of HIV/AIDS.



**MTC= mother to child transmission*
**CSI = Communal use of sharp instruments*

Of the mothers who had ever heard about HIV/AIDS, 46.5% indicated that it is possible to get the HIV virus from mosquitoes and 59.4% indicated that people can get the HIV virus from witchcraft and other supernatural means.

Table 13
Mother's knowledge about AIDS
N=59

Indicator	Response Yes Frequency	Percent true coverage
Can people reduce their chances of getting AIDS virus by having just one sex partner who is not infected and who has no other partners?	38	61.4%
Can people get the AIDS virus from mosquito bites?	28	46.5%
Can people reduce their chances of getting the AIDS virus by using condom every time they have sex?	26	45.5%
Can people get the AIDS virus by sharing food with a person who has AIDS?	33	55.4%
Can people reduce their chances of getting the AIDS virus by abstaining from sexual intercourse?	29	47.3%
Can people get the AIDS virus because of witchcraft or other supernatural means?	40	59.4%
Is it possible for a healthy looking person to have the AIDS virus?	25	33.9%
Is it possible that a healthy looking person who has the AIDS virus could transmit it to his/her sexual partner?	40	64.2%

When initially asked to indicate the modes of transmission of HIV, none of the respondents indicated that HIV could be transmitted from the mother to the child. However, when mothers were asked about mother to child transmission, they indicated that HIV can be transmitted from mother to baby during pregnancy (59.1%), delivery (54.1%) and breastfeeding (49.2%).

6. Discussions and Recommendations

Programme Planning implications

The findings of the LQAS are crucial to the facilitation of data-based planning within specific supervision areas. Based on findings of the LQAS survey, the project is planning to maintain good coverage rates and duplicate successes observed in specific supervision areas. During year four of the project, activities will focus on improving health outcomes measured by the priority targets indicated in the table below. It is anticipated that another LQAS to be conducted in Year 3 of the project will help to inform progress on the indicators.

Table 14
LQAS survey results, Project's target and Target for Project Year 4

Indicators	LQAS Percent True Coverage	End of Project Target	Priority Targets for Project Year 4
Nutrition/Feeding practices Percent of children aged 0-23 months who were breastfed within the first hour after birth.	62.5%	35%	-
% of children aged 0-5 months who were exclusively breastfed during the last 24 hours.	32.7%	15%	-
% of children aged 6-23 months who received a high dose of vitamin A supplement during the last six months.	72.2%	85%	85%
% of children 6-59 months who received deworming medication during the last 6 months.	33.6%	-	-
Maternal and Newborn Care % of women aged 15-49 who know at least two symptoms that indicate the need to seek referral for emergency obstetric care	57.7%	65%	65%
% of children aged 0-23 months whose births were attended by skilled health personnel. (Includes doctor, nurse, MCHA) TBAs were not considered skilled.	22.6%	30%	30%
% of mothers able to report at least two neonatal danger signs.	20.4%	35%	35%
% of mothers who received/ bought >= 90 iron supplements while pregnant with the youngest child less than 24 months.	87.6%	75%	-
% of mothers who received a vitamin A dose during the first two months after delivery.	52.1%	50%	-
% of mothers who received deworming medication during the second or third trimester of a pregnancy within the last two years.	33.8%	-	40%
% of mothers who took anti-malarial medicine to prevent malaria during pregnancy.	55.5%	50%	-
EPI % of mothers with children aged 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child less than 24 months of age.	29.1%	65%	40%
% of children aged 12 – 23 months who are fully vaccinated (against the five vaccine-preventable diseases) before first birthday.	51.9%	60%	60%
% of children aged 12-23 months who received a measles vaccine.	68.6%	80%	75%
Malaria % of children aged 0–23 months who slept under an ITN the previous night.	18.6%	15%	-
% of children aged 0-23 months with a febrile episode that ended during the last two weeks who were treated with an effective anti-malarial drug within 48 hours after the fever began.	0%	40%	40%
Knowledge % of mothers of children aged 0–23 months who know at least two signs of childhood illness that indicate the need for treatment.	81.0%	95%	95%
% of sick children aged 0-23 months who received increased fluids during diarrhoea episode in the past two weeks.	7.4%	-	30%
% of sick children aged 0-23 months who received increased food during diarrhoea episode in the past two weeks.	23.3%	-	30%
% of mothers with children aged 0-23 months who have ever heard about an illness called AIDS.	62.1%	-	80%

Programmatic implications

Breastfeeding/Feeding practices

Breast-feeding is an important determinant of a child's nutritional status and should be continued as long as possible since the protein content in the breast milk is sufficient to meet the need of the child up to the end of the first year of life. However, complimentary foods should be introduced after the sixth month to meet the energy and the micronutrient requirement due to the rapid growth rate.

Giving breast milk up to 18 months is widely practised in all the supervision areas of the project.
However, the survey showed various widespread sub-optimal breastfeeding practices such as mothers giving their children hot water in the early days after birth. Hot water according to some mothers helps the child's stomach to be soft. There are delays in the initiation of breastfeeding immediately after birth. This is largely attributed to the fact that unskilled personnel conduct most deliveries.

Recommendations:

- Communication approaches utilized in Sengbeh chiefdom can be replicated to other chiefdoms such as Wara wara yagala that are experiencing low coverage rates.
- More emphasis is required with health staff in the participating chiefdoms as well as traditional birth attendants on the importance of breastfeeding immediately after birth.
- Additional sensitization on the importance of exclusive breastfeeding (0-6 months) with both male and female (old and young) members of target communities is needed.
- Health workers in all supervision areas should be encouraged to seek innovative ways of minimizing the practice of giving hot water and improving the gradual introduction of complementary feeding (after 6 months).

Diarrhoea

Diarrhoeal diseases are some of the leading causes of child and infant morality worldwide. Early introduction of poorly prepared complementary foodstuffs contributes to causing diarrhoea. Unhygienic food preparation and bottle-feeding introduce foreign bacteria to the systems of young children whose immunity is not strong enough to resist bacterial invasion which can contribute to malnutrition and result in death.

Breastfeeding during a diarrhoeal episode can shorten its duration and reduce the risk of dehydration and malnutrition. Non-breastfed children are about three times more likely to develop moderate or severe dehydration during a diarrhoea episode than children who are breastfed. All supervision areas had very low rates of continued breast-feeding during a diarrhoeal episode.

Recommendations

- Health facility and CSP staff in all the supervision areas and PHU catchments need to focus adequately sensitizing community members in the mixing of ORS and the preparation of homemade SSS.
- Health communication on diarrhoea and its management needs to be stepped up in all the communities to raise communities' knowledge and practice on diarrhoea and it management at community level.

Acute Respiratory Infection (ARI)

Acute Respiratory Infections are some of the most common reasons for childhood illness in the communities. ARI ranges from mild forms of common colds, ear infections, sore throats, bronchitis to severe pneumonia which may be fatal if not treated quickly and appropriately.

Findings from the LQAS study indicate that there were children with ARI during the two-week period preceding the survey. Although a good number of the children with ARI were taken to the clinic for treatment, some mothers also took their children to drug peddlers. Drug peddlers have no knowledge in prescribing medication and diagnosing diseases and sometimes the drugs are expired.

Recommendations

- Emphasis of health communication in all the five supervision areas should be on ARI danger signs and symptoms and the need to urgently seek appropriate medical care upon noticing these danger signs.
- Mothers in all the supervision areas should be encouraged to utilize the local health facility and be sensitised on the dangers of buying drugs from peddlers.

Malaria

Malaria is endemic in Sierra Leone as well as the most commonly reported condition in the entire country. The mis-diagnosis and high frequencies of under treatment of malaria with Chloroquine has resulted in resistance to Chloroquine in sierra leone as well as others countries in the region. The Government has mandated a new treatment protocol for malaria, which is yet to be implemented in the district. During the course of the survey nearly half of the children had fever in the past two weeks before and during the survey. Children with a febrile episode sought treatment either in the clinic or the hospital. Others went to drug peddlers or traditional healers.

Recommendations

- **Wara Wara Yagala chiefdom has higher ITN utilisation rates than the other supervision areas. The promotion, distribution and correct utilisation of long lasting insecticide treated nets (ITNs) by all pregnant women and children under five years of age should be emulated from this chiefdom and replicated throughout all the other supervision areas of the project.**
- **Project support is required for the systematic roll-out of the utilization of the new treatment protocols by PHU staff from all 21 facilities operating in all the supervision areas for the effective management of malaria.**
- **Health Communication to all the supervision areas in the project should disseminate health information especially on malaria (causes, signs, symptoms, treatment and prevention) to community health clubs members so that they too can translate this information to community members to remove local perceptions and beliefs about malaria, particularly given the low level of knowledge on transmission of malaria.**
- **Emphasis in health lessons should be made on the dangers of purchasing drugs and/or taking advice from drug peddlers.**

Immunizations

An effective weapon to fight the common preventable diseases (TB, Polio, Diphtheria, Whooping cough, Tetanus, Measles, Vitamin A and Yellow Fever) is Immunization. A child who is not immunized is more likely to contract these diseases. There is a critical shortage of health personnel in the district. Coupled with compromised mobility, PHU staff do not consistently organise outreach points to improve the immunisation coverage. As a result of this the immunization coverage in the district is low. Mothers take their children for immunization

sometimes for the first or second vaccines and do not return for subsequent vaccines. The drop out rate between DPT 1 and DPT 3 is high.

Recommendations:

- Health promotion to focus on the benefits of immunisation should be focused on Wara Wara Yagala chiefdom due to their low coverage rates for fully immunised children.
- A review to establish whether PHUs in this area are adequately equipped to provide EPI activities should be conducted.
- Since EPI access in the other four chiefdoms is high, awareness campaigns should be conducted on the benefits of immunizations to participating communities to increase their attendance at outreach points. The project should continue to collaborate with UNICEF and MOHS to maintain access to EPI services in the district.

Maternal and Newborn Care

Sierra Leone has the highest maternal and child mortality rates in the world according to the human development index. Antenatal care, tetanus toxoid immunization, skilled attendance at delivery and postnatal care are all components of the child survival project's maternal and newborn care intervention.

This study indicates that coverage rates for Tetanus Toxoid vaccinations were low as well as the number of deliveries conducted by skilled health personnel. Poor access to health facilities as a result of the a limited road network, mother's low knowledge and lack of trained health workers, contribute to the consistent low levels of maternal care resulting in the high percentage of maternal mortality in not only Koinadugu district but the country as a whole.

Recommendations:

- The project should work closely with MOHS to improve antenatal care services by providing outreach services especially to communities staying five or more miles from the health facilities backed by sensitisation of the community on the importance of antenatal care.
- Supply issues for de-worming pregnant women should be investigated in all the supervision areas and accompanied by health promotion activities to increase the rate of mothers receiving de-worming medication.
- Communication initiatives need to target men (husbands) considering the critical role they play in decision-making with regard to where babies are delivered and when and whether referrals are made for complicated deliveries.
- TBAs conduct the majority of deliveries. The project should explore approaches to encourage appropriate referral of mothers with birth complications to the PHU for delivery.

Knowledge about HIV/AIDS

The level of awareness on HIV/AIDS and its transmission is low in the project area. There are clearly many misconceptions about HIV/AIDS prevention and control. Women reported that most of the information they have received on HIV/AIDS is primarily from the radio and also from friends and family as well as the health facility.

Recommendations:

- The project should encourage the sharing of information within households whose members receive health education on HIV/AIDS from Community Health Clubs. All segments of the population (e.g. men, women, youth and health workers) are to be targeted with health education messages on HIV/AIDS.
- Appropriate radio communication should be designed and aired as another avenue for health promotion.

- The project should continue to emphasise HIV/AIDS prevention within the scope of the A -B-Cs – abstain, be faithful and use condoms. Neini chiefdom should receive extra emphasis where low rates of mother's knowledge on HIV/AIDS were evident.

Information Dissemination

Feedback of the LQAS survey results will be provided to the District Health Management Team (DHMT) as well as other NGOs working in Koinadugu. Additionally, dissemination of survey results to chiefdom and section level will take place primarily during community health communication sessions. This will be conducted in collaboration with PHU staff in the project area. These meetings will be utilized to initiate further discussions on the way forward to increase the participation of stakeholders especially improving immunization and maternal and newborn care.

In addition to community level dissemination, the survey report will be circulated at national level to Ministry of Health and Sanitation as well as other international agencies, such as UNICEF, WHO and International Rescue Committee (IRC).

7. Appendices

Chiefdom population statistics and surveyed communities

Supervision area A- Sengbeh Chiefdom

NAME OF VILLAGE	Total Population	Cumulative Population	Interview Location Number	Number of interviews
Nyafurandoh	186	186		
Kurankosansan	82	268	234	**1**
Foronoya	97	365		
Kompala	178	543	479	**1**
Bendukoro I	400	943	724	**1**
Bendukoro II	476	1419	969, 1214	**2**
Yufunu	50	1469	1459	**1**
Koinadugu	1753	3222	1704, 1949, 2194, 2439,2684, 2929,3174	**7**
Kalkoya	726	3948	3419, 3654, 3899	**3**
Fasanya	187	4135		
Kondeya	204	4339	4144	**1**
Nafayie	305	4644	4389, 4634	**2**
Total	**4644**			**19**

n=19 **Sample interval: =4644/19(245)** **Random Number=234**

Supervision area B- Dembellia Sinkunia Chiefdom

NAME OF VILLAGE	Total Population	Cumulative Population	Interview Location Number	Number of interviews
Gbindi I	175	175		
Gbindi II	765	940	213, 449, 675,906	**4**
Gbindi III	828	1768	1137, 1368, 1599	**3**
Gbindi IV	375	2143	1830, 2061	**2**
Gbindi V	232	2375	2292	**1**
Masendeh	61	2436		
Dalabaya	178	2614	2523	**1**
Saliyereh	1030	3644	2754, 2985, 3216, 3447	**4**
Yedia	124	3768	3678	**1**
Mannah I	450	4218	3909, 4140	**2**
Mannah II	170	4388	4371	**1**
Total	**4388**			**19**

n=19 **Sample interval: =4388/19 (231)** **Random Number=213**

Supervision area C- Neini Chiefdom

NAME OF VILLAGE	Total Population	Cumulative Population	Interview Location Number	Number of interviews
Yiffin	138	138	104	**1**
Saransiya	483	621	272, 430, 588	**3**
Telikoro	302	923	746, 804	**2**
Yiben	660	1583	962, 1120, 1278	**3**
Soya	546	2129	1594, 1652, 1710, 1868, 2026	**5**
Fankoya	864	2993	2184, 2362, 2520, 2678, 2836	**5**
Total	**2993**			**19**

n=19 **Sample interval: =2993/19(158)** **Random Number=104**

Supervision area D-Wara Wara Yagala Chiefdom

NAME OF VILLAGE	Total Population	Cumulative Population	Interview Location Number	Number of interviews
Kamajimbo	225	225	52,215	**2**
Igaia	310	535	378,	**1**
Kasumpe	506	1041	541, 704, 867, 1030	**4**
Kamanso	92	1133		
Alusainya	377	1510	1193, 1356,	**2**
Makakura	253	1763	1519, 1682,	**2**
Makakura/Konkoya	158	1921	1845,	**1**
Kordalla	90	2011	2008	**1**
Sokralla	116	2127		
Bendukura	299	2426	2171, 2334,	**2**
Songabalia	206	2632	2497,	**1**
Timbo Sokralla	456	3088	2660,2823, 2986,	**3**
Total	**3088**			**19**

n=19 **Sample interval: =3088/19(163)** **Random Number=52**

Supervision area E- Folosaba Dembellia Chiefdom

NAME OF VILLAGE	Total Population	Cumulative Population	Interview Location Number	Number of interviews
Musaia I	750	750	228, 566	**2**
Musaia II	1000	1750	904, 1242, 1580	**3**
Musaia Junction	365	2115	1918	**1**
Koromasilaia	1002	3117	2258,2596, 2934	**3**
Gbentu I	340	3457	3272	**1**
Gbentu II	330	3787	3610	**1**
Gbentu III	310	4097	3948	**1**
Gbentu Haffia	400	4497	4286	**1**
Hamdalai	240	4737	4624	**1**
Dogoloya I	570	5307	5300	**1**
Dogoloya II	522	5829	5638	**1**
Dogoloya III	591	6420	5976, 6214, 6552	**3**
Total	**6420**			**19**

n=19 **Sample interval:=6420/19(338)** **Random Number=228**

Survey Participants

No.	Name	Designation	Project
1	Vandy S. Kamara	APM	CSP
2	Bockarie Sesay	HMELO	CSP/SAY
3	Sayoh A. Francis	CHFS	CSP
4	Iysattu Kamara	CHFS	CSP
5	Sowo Tucker	HEO	CSP
6	Edmond Brandon	CHM	CSP
7	Mohamed Kamara	CHM	CSP
8	Momoh Z. Konyanday	CHM	CSP
9	Momodu Sesay	CHM	CSP
10	Adama Yambasu	Intern	MMCET

Survey Questionnaire

1. Chiefdom	2. Section	3.Village	4. Respondent	5. Date ____/_____/05	6.Team

	Name of the youngest child (0-24 months)	**Name:_____**
001.	**Date of Birth (as recorded on: birth certificate, antenatal card or under-five card).**	**Day** |____| **Month** |____| **Year** |____|
002.	**If no documentation available, record mothers estimation in months. If there is a card write N/A in the space provided for number of months.**	**Number of months** **…….**
003.	**Sex**	**Male ……..1** **Female……...2**

100.Child Immunization (Record information for the youngest child that is<24 months)

101.	**Does (name) have an under-five card?**	**Yes ….1** **(if yes, ask to see it)** **No …2** **(if no, go to 110)**
102.	**Record all vaccinations dates (mm/dd/yy) from the card.** **BCG**	**Yes ….1** **Date:_____/_____/_____** **No …2** **Yes, scar …3**
103.	**Polio 0 (polio given at birth)**	**Yes ....1** **Date:_____/_____/____** **No …2**
104.	Polio 1	Yes ..... …1 Date:_____/_____/_____ No..... …2
105.	Polio 2	Yes ..... …1 Date:_____/_____/_____ No..... …2
106.	Polio 3	Yes ..... …1 Date:_____/_____/____ No..... …2
107.	DPT 1	Yes ..... …1 Date:_____/_____/_____ No..... …2
108.	DPT 2	Yes ..... …1 Date:_____/_____/_____ No..... …2
109.	DPT 3	Yes ..... …1 Date:_____/_____/_____ No..... …2

110.	**Has (name) been vaccinated for measles?**	**Yes (verified) ……....1** **Date:_____/_____/____** **Yes (no card) ……2** **No ……3** **N/A ……4** **(<9 months)**
111.	Did (name) take a vitamin A dose in the last 12 months? (only for children >6 months)	**Yes ……1** No.....2 Don't know.....8 N/A 3
112.	Did (Name) receive de-worming medicine in the last six months? (only for children >6 months)	Yes .....1 No.....2 Don't know.....8 N/A 3
113.	Did you (the mother of survey child) receive de-worming medicine between the 4^{th}-9^{th} month of your pregnancy with (name)?	Yes .....1 No.....2 Don't know.....8
114.	Did you receive blood tablets while you were pregnant with (name)? **Be sure to show her the sample tablets.**	Yes .....1 No.....2 Don't know.....8
115.	Did you receive a dose of vitamin A during the first two months after delivery of (name)? **Be sure to show her the sample capsule.**	Yes .....1 No.....2 Don't know.....8
200. Socio-Demographic Data		
201	What is your marital status?	Married……..1 Divorced……..2 Widow……...3 Single……4
207	How many live births have you had?	One……1 Two……...2 Three……3 Four……...4 Five……5 Six……6 Seven……7 Eight……..8 Nine……..9 Ten plus……..10
208	Of these live births, are all these children alive today?	Yes……1 If yes, go to 201) No……..2
209	If not, how many have died?	……
300. Economic Status		
301	What type of house do you live in?	Mud andwattlew/grass roof……1 Mud and wattle w/iron sheets roof……..2 Mud Brick w/grass Roof……...3 Mud Brick w/iron sheets Roof...4

		Cement Brick w/grass Roof……5 Cement Brick w/iron sheet Roof..6 Hut (single round structure with 2doors……..7 Other……...……8
302	302. Does your household have?	**Yes** **No** Radio……..1 2 Tape recorder……..1 2 Charcoal pot……1 2 Stove (single-burner).1 2 Stove(multi-burner)..1 2 Bicycle……..1 2 Motorcycle……1 2 Sewing machine……1 2 Large cooking pot….1 2
303	What fuel do you use to cook with normally?	Wood……..1 Charcoal……2 Kerosene……3 Other……..…….4
304	Does your household own Poultry?	Yes……..1 No……..2
305	Does your household own sheep/goats?	Yes……..1 No……..2
306.	Does your household have a back -yard garden?	Yes……..1 No……..2
307.	Does your household own cattle?	Yes……..……1 No……..2

400. Breastfeeding/Feeding practices (Record information for the youngest child that is < 24 months)

401.	Did you ever breastfed (name)?	Yes……..1 No……...2 (if no, go to 407)
402.	How long after birth did you start breastfeeding (name)?	Immediately/within first hour after birth……1 After the first hour……0 Don't remember……8
403.	During the first three days after delivery, did you give (name) the liquid came from your breasts?	Yes……..1 No……..2 Don't know……8
404.	During the first three days after delivery, did you give (Name) anything to eat or drink before feeding him/her breast milk?	Yes……..1 No……..2 (If no, go to 406)
405.	What did you give (Name)? Anything else?	Milk(other than breast milk)…A Plain water……B Water with sugar and/or salt….C Fruit juice……D

	Do not read the list Record all mentioned by circling letter for each one mentioned.	Tea infusions…….E Liquid or semi-liquid traditional medicine…..……..F Infant Formula……..G
406.	Are you currently breastfeeding (Name)?	Yes……..1 (go to 8) No……..0
407.	For how long did you breastfeed (Name)? If less than one month, record ‘’00’’months	Months…….|___|___|
408. A B C D E F G H	Now I would like to ask you about the types of liquids (name) drank yesterday during the day and night. Did (Name) drink any of the following liquids yesterday during the day or night? Read the list of liquids (A through H starting with breast milk). Place a che mark in the box if child drank liquid in question. Breast milk? Plain water? Commercially produced Formula? Any other milk such as tinned, powdered, or fresh animal milk? Fruit juice? Tea or coffee? Any other liquid? Optional liquid group: add if commonly given to infants/children Liquid or semi-liquid traditional medicine?	A……|___| B……|___| C……|___| D……|___| E……|___| F……|___| G……..|___| H……|___|
409	Did (name) drink anything from a bottle with a nipple yesterday or last nig	Yes .....…….1 No.....…….0 Don’t know……8
410 a	Now I would like to ask you about the food (Name) ate yesterday during day and at Night, either separately or combined with other foods. Did (Name) eat any of the following foods yesterday during the day night? READ THE LIST OF FOODS.PLACE A CHECK MARK IN THE BOX THE CHILD ATE THE FOOD IN QUESTION. Pap or soft Rice? Any (Brand name of commercially fortified baby food e.g. Bennimix) Any bread, rice, noodles, biscuits, cookies, or any other foods made f	A……|____| B……..|____| C……..|____|

	grain? Any white potatoes, white yams, manioc, cassava, or any other foods m from fruits. Any pumpkin, carrot, squash, or sweet potatoes that are yellow or ora inside? Any dark green leafy vegetables? Any ripe mangoes, paw paw, (or other local vitamin A-rich fruits)? Any other fruits or vegetables? Any liver, kidney, heart or other organ meats? Any beef, pork, lamb, goat, rabbit, (insert wild game meet such as antelop deer)? Any chicken , duck or other birds? Any egg? Any fresh or dried fish or shellfish? Any foods made from beans, peas, or lentils? Any nuts? Any cheese or yoghurt? Any food made with other oil, fat, or butter? Any other solid or semi-solid food?	D……|____| E……..|____| F……..|____| G……..|____| H……..|____| I……|____| J……|____| K……...|____| L……|____| M……...|____| N……|____| O……|____| P……|____| Q……|____| R……|____|
411.	How many times did (Name) eat solid, semi-solid, or soft foods other liquids yesterday during the day and at night? IF CAREGIVER ANSWER SEVEN OR MORE TIMES, RECORD "7" SEMI-SOLID FOODS COULD BE PAP, MASHED RICE, PORRID ETC.	Number……...|___| Don't know……|___|
412.	IN AREAS WHERE IODIZED SALT IS AVAILABLE May I see the salt that is used for cooking?	Fortified ……1 Not fortified……..0 Not available for check……..…8
413.	Did (Name) receive a Vitamin A dose like this during the last six months? SHOW CAPSULE	Yes……..1 No……..0 Don't know……8
414.	Is (Name) currently taking iron tablets or iron syrup (like this, or any of these)? SHOW THE IRON TABLET.	Yes……..…1 No……..0 Don't know……..8

500. Diarrhoea **Record information for the child that is < 24 months**

501.	Has (Name) had diarrhoea in the past two weeks?	Yes……...……1 No.....……..2 (if no, go to 601)
502.	Did you breastfeed (name) while he had diarrhoea?	Child not breastfed…..……1 Less than usual.....……..2 As usual.....……..3

		More than usual.....……...4 Don't know.....……8
503.	Did you give (name) food while he had diarrhoea?	No.....……..1 Less than usual.....……..2 As usual.....……..3 More than usual.....…….4 Don't know.....…….8
504.	Did you give (name) liquids while he had diarrhoea?	No.....…….1 Less than usual.....…….2 As usual.....…….3 More than usual.....…….4 Don't know.....…….8
505.	Did you feed (name) during the recovery period? If the child still has diarrhea code as N/A=5	No.....…….1 Less than usual.....…….2 As usual.....…….3 More than usual.....…….4 N/A .....…….5 Don't know.....…….8
506.	What did you give (name) when he had diarrhoea? (circle all that apply)	Nothing .....…….1 Water. .....…….2 ORS.....…….3 Water meresin .....…….4 Rice pap.....…….5 Pills.....…….6 Syrup .....…….7 Don't know.....…….8 Jelly water.....…….9 Other.....…….10
507	Did you seek treatment from someone outside the home for (name's) diarrhoea?	Yes .....…….1 No.....…….2 (if no, go to 511)
508.	Where did you **first** go for treatment?	District hospital.....……..1 Clinic.....…….2 TBA .....…….3 Traditional.....……4 BFV.....……5 Spiritual.....……6
509.	Who decided that you should go there for (Name's) illness?	Self.....……1 Husband.....……2 In-laws.....……3 Auntie.....……4 Friend.....……5 Health worker.....……6
510.	Where did you go **next** for treatment?	District hospital.....……..1 Clinic.....…….2 TBA .....…….3 Traditional.....…….4 N/A .....…….5
511.	Have you heard of ORS?	Yes .....…….1 No.....……..2 (if no, go to 513)
512.	Please describe how you prepare ORS?	Correctly.....…….1 Incorrectly.....…….2

	Correct description: 1. Use 1 liter of clean drinking water (1liter = 3 soft drink pints) 2. Use the entire packet 3. Dissolve the powder fully (Stir well) Once mother has provided a description record whether she described ORS preparation correctly or incorrectly. If she mentioned all three of the above circle '1', Anything else circle '2'	
513.	Have you heard of SSS?	Yes .....1 No.....2 (if no, go to 601)
514.	Please describe how you prepare wata merresin? **Correct description**: 1. Use 1 liter of clean drinking water (1liter = 3 soft drink pints) 2. Add 8 level teaspoons (or bottle stoppers) sugar and 1 level teaspoons (or bottle stoppers) salt 3. Stir well Once mother has provided a description record whether she described SSS preparation correctly or incorrectly. If she mentioned all three of the above circle '1', Anything else circle '2'	Correctly.....1 Incorrectly.....2

<u>600. Acute Respiratory Infections</u> Record information for the child that is < 24 months

601.	Has (Name) had an illness with a cough in the past two weeks?	Yes .....1 No.....2 (if no, go to 701)
602.	When (name) had an illness with a cough, did he/she have trouble breathing or breathe faster than usual with short fast breaths?	Yes .....1 No.....2 Don't know.....8
603.	Did you seek treatment for the cough/fast breathing?	Yes .....1 No.....2 (if no, go to 608)
604.	How long after you noticed (Name's) cough and fast breathing did you seek treatment?	Same day.....1 Next day .....2 Two days .....3 Three days or more……4
605.	Where did you **first** go for treatment?	District hospital.....1 Clinic .....2 TBA .....3 Traditional.....4 Spiritual.....5 BFV.....6 Drug peddlers.....7 Pharmacy.....8
606.	Who decided that you should go there for (Name's) illness?	Self .....1 Husband.....2 In-laws 3

		Auntie……4 Friend……5 Health worker……6 BFV……7
607.	Where did you go **next** for treatment?	District hospital……1 Clinic……2 TBA……3 Traditional……4 Spiritual……5 BFV……6 Drug peddlers……7 N/A……8
608.	Which medicines were given to (name)?	Nothing……1 Aspirin……2 Panadol……3 Septrine……4 Pen VK……5 Herbs……6 Amoxil……7 Don't know……8

<u>700. Malaria:</u> Record information for the youngest child that is < 24 months

701.	Has (Name) been ill with fever in the past two weeks?	Yes……1 No……2 (if no, go to 801)
702.	Does (Name) have a fever now?	Yes……1 No……2
703.	Did you seek advice or treatment for (name's) fever?	Yes……1 No……2 (if no, go to 711)
704.	Where did you go **first** for treatment?	District hospital……1 Clinic……2 TBA……3 Traditional……4 Spiritual……5 BFV……6 Drug peddlers……7
705.	How long after you noticed (names) fever did you seek treatment from that person/place?	Same day……1 Next day……2 Two days……3 Three days or more……4
706.	Who decided that you should go there for (name's) illness?	Self……1 Husband……2 In-laws……3 Auntie……4 Friend……5 Health worker……6
707.	Where did you go **next** for treatment?	District hospital……1 Clinic……2 TBA……3

				Traditional.....…….4 Spiritual.....…….5 Drug peddlers.....…….6 N/A .....…….7
708.	Was (name) treated with any medicine?			Yes .....…….1 No.....…….2 (if no, go to 711)
709.	Which medicines were given to (name)? Circle all medicines that were given. If mother is unable to recall drug name(s) ask her to show them to you. For each anti-malarial medicine ask: **How long after the fever started did (name) start taking the medicine?**			**G. Don't know** Same day.....……..1 Next day .....……..2 Two days .....……..3 Three days or more…….……4 Don't know.....…….8
	A.Chloroquine Same day……1 Next day…….2 Two days……3 Three days or more.4 Don't know……..8 E.Other_____ Same day…….1 Next day…….2 Two days……....3 Three days or more.4 Don't know……..8	B. Halfan Syrup Same day…….1 Next day……..2 Two days…….3 Three days or more.4 Don't know…….8 F. Fansidar Same day……..1 Next day……...2 Two days……..3 Three days or more4 Don't know……8	C. Panadol Same day…...1 Next day……2 Two days…..3 Three days or more……..4 Don't know…8	**D. Herbs** Same day.....……..1 Next day .....……..2 Two days .....……..3 Three days or more…….……4 Don't know……..8
710.	Did (name) receive an injection (mark late) at anytime for his fever?			Yes .....……..1 No.....……..2 Don't know.....……..8
711.	What causes Malaria? Record all mentioned.			Mosquito bites……1 Witchcraft .....…...2 Injection/drips.....……3 Sucking oranges .....……4 Drinking beer.....……5 Eating plenty oil.....……6 Sharing razors/blades……..7 Palm wine……8 Eat plenty Mango.....……9 Bed bugs……10 Eating sugar……11 Don't know……..12 Other……..……...13
712.	Do you have bed nets in your room? If she responds yes, ask if you can see the net.			Yes (verified).....…..…..1 No.....…..…..2 (if no, go to 715) Yes (not verified).....…….3
713.	Who slept under the bed net last night?			Child.....…….1 Myself .....…….2 Husband.....…….3 Myself w/child .....…….4 Myself w/husband ....…….5 All of the above .....…….6
714.	Was the bed net ever soaked or dipped (ITN) in a liquid to repel			Yes .....…….1

	mosquitoes or bugs?	No.....2 Don't know.....8
715.	When you were pregnant with (name) did you take any drugs to prevent you from getting malaria?	Yes .....1 No.....2 (if no, go to 801) Don't know.....8 (if don't know, go to 801)
716.	Which drugs did you take?	Chloro1quine.....1 Fansidar.....2 Herbs .....3 Don't know.....8

800. Maternal and Newborn Care

801.	Did you see anyone for Antenatal care while you were pregnant with (name)?	Yes .....1 No.....2
802.	Do you have a maternal health card for your pregnancy with (name)? **Ask to see the card if mother responds yes**	Yes (verified).....1 No.....2 Yes (not verified).....3 Don't know.....8
803.	Before you gave birth to (Name) did you receive an injection (marklate) in the arm to prevent the baby from getting tetanus that is convulsions after birth?	Yes .....1 No.....2 (if no, go to 805) Don't know.....8
804.	How many times did you receive such an injection (marklate)?	Once.....1 Twice .....2 More than twice.....3 Don't know.....8
805.	**Now I would like to ask you about the time when you gave birth to (Name).** Where did you give birth?	Home.....1 Other home .....2 Clinic .....3 Hospital.....4 Other.....5
806.	Who assisted you with (Name's) delivery?	TBA .....1 Nurse.....2 Doctor.....3 MCH assistant .....4 Family member.....5 No one.....6
807.	What instrument was used to cut the navel cord?	New razor blade.....1 Old razor blade .....2 Knife .....3 Scissors .....4 Other.....5 Don't know.....8
808.	Where was (name) put immediately after birth?	With mother.....1 In cot.....2 On floor.....3 Bath.....4

		Taken away.....5 Don't know.....8
809.	What did you do with (name) immediately after birth?	Breastfed.....1 Bathed .....2 Let sleep.....3 Nothing .....4 Don't know.....8
810.	What are the symptoms immediately after birth that could indicate the child is not well?	Not breathing .....1 Jaundice/Yellow.....2 Convulsions .....3 Not crying.....4 Conjunctivitis .....5 Others .....6 Don't know.....8
811.	How far (in miles) are you from the nearest health facility?	Distance (in miles)_____
812.	How would you get there?	Walk.....1 Bicycle .....2 Hammock.....3 Motorcycle .....4 Vehicle 5
813.	How long would it take you to get there?	Less than 1 hour.....1 1-3 hours .....2 More than 3 hours…….3 Don't know.....8
814.	Who would decide that you should go there?	Self .....1 Husband.....2 In-laws .....3 Auntie .....4 Friend.....5 Health worker.....6 BFV.....7
815.	What are the symptoms during pregnancy indicating the need to seek health care? (Circle all that are mentioned)	Fever.....1 Shortness of breath……2 Bleeding .....3 Swelling of body.....4 Paleness .....5 Persistent vomiting…….6 Abdominal pain.....7 Don't know.....8 Others 9
816.	Where is the first place you would go for care if you had these symptoms?	District hospital.....1 Clinic .....2 TBA .....3 Traditional.....4 N/A .....5 Don't know.....8

1000. HIV and AIDS

1001.	Have you ever heard an illness called AIDS (SIDA)?	Yes……..…..1 No.....2

		(if no, go to 1005)
1002.	Where did you hear about HIV/AIDS? A maximum of three responses is allowed for this questions	Radio.....1 Health Centre.....2 Workshops.....3 Village health talks….. ..4 Handouts .....5 NGOs .....6 Family members.....7 Friends.....8 Others 9
1003.	How is HIV/AIDS transmitted? **A maximum of three responses is allowed for this questions**	Unprotected sex.....1 Blood transfusion.....2 Mother to child .....3 Communal use of sharp instruments4 Don't know.....5
1004.	Can people reduce their chances of getting AIDS virus by having just one sex partner who is not infected and who has no other partners?	Yes……..1 No……...2 Don't Know……88
1005	Can people get the AIDS virus from mosquito bites?	Yes…….1 No……..2 Don't Know……88
11006	Can people reduce their chances of getting the AIDS virus by using condom every time they have sex?	Yes…….1 No……..2 Don't Know……88
11007	Can people get the AIDS virus by sharing food with a person who had AIDS?	Yes……..1 No……..2 Don't Know……88
51008	Can people reduce their chances of getting the AIDS virus by abstaining from sexual intercourse?	Yes…….1 No……..2 Don't Know……88
51009	Is it possible for a healthy looking person to have the AIDS virus?	Yes…….1 No……..2 Don't Know……88
1010	Is it possible that a healthy looking person who has the AIDS virus could transmit it to his /her sexual partner?	Yes…….1 No……..2 Don't Know……88
1011	Can the virus that causes AIDS be transmitted from a mother to her baby (Interviewer **asks A-C)** A) During pregnancy? A) During delivery? B) By breastfeeding?	**Yes** **No** **DK** **1** **2** **88** 1 2 88 1 2 88
1012	When you were pregnant with (Name), did you see anyone for antenatal care?	Yes…….1 No……..2 Don't Know……88
1013	During any of the antenatal visits for the pregnancy , did any one talk to you (interviewer asks A-C) a) Babies getting the AIDS virus from their mother? b) Things that you can do to prevent getting the AIDS virus? c) Getting tested for the AIDS virus?	**Yes** **No** **DK** **1** **2** **88** 1 2 88 **1** **2**

		88

Interviewer_____ **Supervisor_____**

Sign after complete completeness **Sign after checked for completeness**

CARE Sierra Leone

Child Survival Project:

"For Di Pikin Dem Wel Bodi (For The Health of the Child)"

Report of Assessment of Quality of Care in Health Facilities (COPE), May 2005

Consultant: Allan Robbins, MPH

Cooperative Agreement No: HFP-A-00-02-00046-00
Project Duration: October 1, 2004 to September 30, 2008 (FY2004-2008)
Project Location: Koinadugu District, Sierra Leone

CARE USA Contact:
Joan M. Jennings, MPH
CARE USA
151 Ellis St., NE
Atlanta, GA 30303
Tel: 404-979-9413
Fax: 404-589-2624
Email: jjennings@care.org

ACRONYMS

ANC	Ante Natal Care (Prenatal Care)
ARI	Acute Respiratory Infection
BCC	Behavior Change Communication
BCG	Tuberculosis vaccine (Bacillus Calmette-Guérin)
CARE	Cooperative Assistance and Relief Everywhere – International NGO
CCF	Christian Children's Fund (NGO)
CDC	Community Development Committee – officially called VDC's
CES	Christian Extension Services (NGO)
CHC	Community Health Club (Community-based groups initiated by CARE CS project)
CHP	Community Health Post
CPA	Complementary Package of Activities (Activities at the Dist. Level Health Centers)
CRS	Catholic Relief Services (NGO)
CWC	Chiefdom Welfare Committee
DIP	Detailed Implementation Plan
DPT	Diphtheria, Tetanus, Pertusis, vaccine (also known as DTC)
DHC	District Health Center
DHMT	District Health Management Team
DHOO	District Health Operations Officer
DHS	District Health Sister
DMO	District Medical Officer
DSMC	District Social Mobilization Committee
EPI	Expanded Program on Immunization
FSU	Family Support Unit
HIS	Health Information System
IEC	Information, Education, Communication
ITN	Insecticide Treated Net
MCH	Maternal and Child Health (also known as PMI)
MCHA	Maternal Child Health Aide (Primary staff of Community Health Posts)
MOHS	Ministry of Health & Sanitation
MSF	Medecins Sans Frontieres (Doctors Without Borders)
NaCSA	National Commission for Social Action
NAS	National AIDS Secretariat
NIDs	National Immunization Days
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PHU	Peripheral Health Unit – any health facility outside of the District Hospital
SMO	Social Mobilization Officer
TB	Tuberculosis
TBA	Traditional Birth Attendant
PRA	Participative Rural Appraisal
PVO	Private Voluntary Organization
TTBA	Trained Traditional Birth Attendant
VDC	Village Development Committee
VHW	Village Health Worker

Executive Summary

Sierra Leone is a West African nation of 4.9 million people emerging from a decade of civil war which resulted in tens of thousands of deaths and the displacement of more than 2 million people (one-third of the population). With the support of a large UN peacekeeping force, national elections were held in May 2002 and the government continues to slowly reestablish its authority. However, the gradual withdrawal of most UN (UNAMSIL) peacekeepers scheduled for late 2005 plus deteriorating political and economic conditions in Guinea and the tenuous security situation in neighboring Liberia may present challenges to the continuation of Sierra Leone's stability.

Sierra Leone also faces the challenge of reconstruction. The problems of poverty, ethnic rivalry and official corruption that contributed to the war are far from over. Though rich in diamonds and other natural resources, Sierra Leone struggles with a per capita income of US$150/year, the highest Under 5 Mortality Rate in the world (250/1000; 1 in 4), and a life expectancy of 34 (33-men & 35-women) [WHO 2005].

CARE-Sierra Leone is in its second year of a Child Survival program, centered in five Chiefdoms of Koinadugu District in north-eastern Sierra Leone (Fig. 1.2.2). Due to mountainous terrain and poor roads, the district's population is the most dispersed (Fig. 1.2.4) and least accessible in the nation. Koinadugu district does not share in the mineral or agricultural resources found in other parts of the country and with five distinct languages spoken in the district (Fig. 1.2.3) and high illiteracy rates, it faces some of the steepest barriers to development.

CARE's integrated Child Survival project is focused on capacity building for health care staff at both the District Health Center and Hospital, and the staff of 21 Peripheral Health Units. CARE has also emphasized developing supportive community-based organizations. Since the project started, they have formed and trained 56 Community Health Clubs composed of 1882 village health volunteers who are active in their communities. Having completed a 30-Cluster KPC survey for project baseline and a recent LQAS survey of mothers with children under age two, the project wanted to also find a way to assess the quality of health services, identify ways in which the project can assist in improvements, and establish baseline information for later evaluation of quality and sustainability.

The COPE methodology was developed in 1995 as a handbook to help improve the quality of family planning services. Since then, it has been adapted to assess IMCI child survival programs. CARE elected to use the COPE methodology as it is participatory, broad yet easy-to-use, and contributes to building the capacity of field staff and health staff partners to include assessment as an on-going monitoring tool for continuous improvement. COPE focuses on practical steps of improvement by developing Action Plans at every step. COPE also highlights Gaps in perception between the community and health providers which can lead to greater "buy in" by the community as they see their suggestions acted on.

In this assessment, 8 of the 10 COPE Self-Assessment Guides for Child Health Services were included. Guide 10, Staff Need for Supplies, Equipment and Infrastructure, was adapted to the

Sierra Leone National Primary Health Care Manual checklist of inputs. These self-assessment tools were used by the COPE assessment team to facilitate numerous Guided Discussions, much like focus groups, with groups of health care staff and with community-based groups. Additionally a short interview and checklist were developed and used at all PHUs in the project area. The tool for Client Exit Interviews was also used in this assessment, with 15 clients both at the District Health Center and at 12 Primary Health Units (PHU). As national IMCI protocols have not yet been introduced into practice in rural health facilities in Sierra Leone, the COPE-IMCI Record Review was not utilized in this exercise. Additionally, as the Health Posts that the project works with are struggling with under-utilization, the Patient Flow Analysis tool was also postponed to a future exercise.

The process included one day of planning, two days of training, four days of assessment, one day of participative analysis and a day of feedback and reporting to the District Health Management Team and NGO community. COPE Exercises were conducted and COPE Action Plans developed with Community Health Clubs, PHU clinic staff, District Hospital Staff and DHMT members. These action plans and findings were presented to the DHMT and NGO community and a new District Coordinating Committee was re-initiated which will have, as a monthly agenda item, the follow-up of the various COPE action plans and recommendations.

Key results from **Client Exit Interviews** showed that clients used the services for both curative and preventive care, including vaccinations, growth monitoring and promotion, ante natal and post natal care. Clients generally expressed satisfaction with services and felt they had received what they came for, with only a few waiting an excessive amount of time for treatment. Although health staff have not had recent training in counseling, Client Exit Interviews showed that most clients were given at least some messages during their visit on such topics as immunization, breastfeeding, complementary feeding of children and warning signs for children and pregnant women, malaria. Most clients stated they were clearly instructed how to take medicines prescribed and were given simple care practices for sick children. They were aware of the presence of family planning services at the health facility. They described staff as polite and appreciated clean bed nets and sheets at the facility. They disliked limited staff, expensive drugs or fees and unclean facilities.

The perception of **Community Health Clubs** expressed in **Guided Discussions** was varied. Several positives were noted, such as encouragement to give birth in health facilities and explanation of sick child care measures -- while multiple problems were identified. Most problems were related to the cost of care, difficulties for transport and referral to the next level of care, and increased need for outreach by health facilities. Community members also expressed a need for HIV testing at local health facilities, which does not yet exist.

Guided Discussions with **Health Unit staff** highlighted a lack of equipment and materials (from soap to beds to laboratory testing), a lack of education materials on certain topics (STI/HIV, family planning), and infrastructure repair needs among other issues. **Guided Discussion** with **district hospital staff** noted a variety of positive factors, such as the availability of hand washing and disposal facilities and focus by staff on maternal care and child health issues. However, weaknesses in almost all systems were also noted, such as a lack of disinfectant, sufficient staff,

functioning health information system and other.

Checklists revealed serious under-staffing at the district and Primary Health Unit levels as compared to national guidelines. A lack of some supplies was found, but with inconsistent results per health facility. A surprisingly low stock of essential medicines was found at a few of the PHUs and a plan for further inventory and supply, if necessary, was one of the key elements of the Action Plan from this assessment. Transportation (ambulance, four wheel drive vehicles and motorcycles) is available roughly at the level called for by national norms, including one ambulance, two four-wheel drive vehicles and 8 functioning motorcycles.

The COPE Assessment team had full participation during the process by the District Health Operations Officer and the Social Mobilization Officer from the District Health Management Team. Four other members of the DHMT attended and actively participated in discussions at the presentation of the key findings at the end of the assessment process. While the DHMT had a positive and supportive attitude towards the COPE process throughout, other DHMT staff did move from an initial stance that was somewhat defensive to appreciating how the COPE tools can be helpful in their work by guiding supportive supervision and monitoring inventory.

The formation of a follow-up COPE committee was suggested early on by assessment participants. As momentum grew between the DHMT, the District Council, UNICEF, and CARE, the group approved re-launching the District Coordinating Committee. However, this time it will be chaired by the DHMT rather than an NGO as was previously the case. COPE follow-up will be a monthly agenda item for this group and, if it goes as planned, will be a very positive contribution towards project sustainability.

The COPE Assessment Team also used this time to look at the first Dimension of Sustainability within the Child Survival Sustainability Assessment tool, as follow on to their initial participation with technical assistance from CSTS in developing indicators for all three Sustainability Dimensions as part of developing the project Detailed Implementation Plan.

The over-arching goal of this assessment was to introduce the COPE methodology for Quality Self-Assessment to CARE Sierra Leone Child Survival Project staff and the District Health Management Team in such a way that they recognized its value and understood it sufficiently well to repeat the process during the life of the project.

The CARE-CS project appears to have a gifted leadership team and competent and passionate field staff. They enjoy a good working relationship with the MOHS DHMT which provided two key members for the full exercise as a part of the COPE team. They seemed to quickly grasp the purposes of the COPE methodology and understand the various parts and their sequence. The COPE team gave lead to the training, adaptation, assessment, analysis and feedback, and now have the capacity to repeat the exercise.

For De Pikin Dem Wel Bodi (the Health of the Child) Child Survival Project XIX

CARE Sierra Leone

Mid-term Evaluation Terms of Reference

Contact Persons:

Joan Jennings, Senior Technical Advisor, CARE USA

Garth Van't Hul, Assistant Country Director, Programmes, CARE Sierra Leone

TERMS OF REFERENCE

1. Project: Child Survival Project (CSP) XIX
2. Point Person(s): CARE USA & CARE Sierra Leone
3. Project Funding Cycle: October 2003 to September 2008
4. Donor: USAID

Background

1. The Child Survival Project (CSP) XIX has been operating in Koinadugu District, Sierra Leone since 2003 with funding by USAID. Project activities commenced in October 2003 in collaboration with the Ministry of Health and Sanitation (MOHS).

2. The project goal is to improve the health status of children under five years of age and women of reproductive age in five chiefdoms in Koinadugu district. The district is located in the northeastern part of Sierra Leone. Direct beneficiaries of the project include an estimated 48,630 children less than five years of age and 51,491 women aged 15-49 years living in five of the district's 11 chiefdoms. This catchment areas includes the District Hospital and 21 Peripheral Health Units (PHU). People living in the district's remaining six chiefdoms are secondary beneficiaries of the project, particularly through capacity building of district-level MOHS staff.

3. Intervention areas include: expanded program of immunization (EPI), nutrition, malaria and maternal and newborn care (MNC) through a grassroots, civil-society building variation of the overarching Community Integrated Management of Childhood Illness (C-IMCI) approach.

4. The objectives of the project are:
    a. Strengthened family and household knowledge and decision-making skills related to health of women and children resulting in the practice of positive behaviors to prevent, recognize and manage common diseases;
    b. Enhanced community capacity to form groups and institutions that sustain health initiatives, demonstrate social cohesion, and promote good governance mechanisms;
    c. Improved quality and accessibility of services provided by MOHS personnel and MOHS extension services;
    d. Ensured sustainability of the activities and achievements of the project.

5. These objectives will be reached using four main strategies:
    a. Capacity building of institutions and partners through training;
    b. Organizational diagnosis activities and subsequent action on areas of need.
    c. Behavior Change Communication (BCC) activities to promote physical health, prevent disease, improve home management of disease, promote appropriate care-seeking practices among caretakers and household members, and improve practices of health care providers.
    d. Quality Assurance initiatives, largely based on the Client Oriented Provider Efficient (COPE) process, include the development of protocols and instruments that will guide an innovative system of creating opportunities for peer feedback.

6. Health Clubs have been formed, composed of 1,882 village health volunteers who are active in their communities.

7. The CSP commenced its Sustainability Assessment (CSSA) prior to the development of the project's Detailed Implementation Plan (DIP) and has continued to reflect on Sustainability of health outcomes throughout the project's implementation process.

8. CARE Sierra Leone is the executing Agency for the project. CARE Sierra Leone and the Ministry of Health and Sanitation implement the project in collaboration with partners such as Christian Extension Services (CES) and Radio Bintumani. With the recent devolution of some health services to local government, local government at district level is emerging as a strong stakeholder working towards improving the quality of health services.

Evaluation Design
The design consists of the following five elements: purpose, users, uses, questions, methods and agreements.

Purpose
The purpose of the mid-term evaluation is to assess the effects of CSP on the target population. The evaluation uses data and information from the program's monitoring system and other sources to: (a) assess progress in implementing the detailed implementation plan (DIP); (b) assess progress towards achievement of objectives or yearly benchmarks; (c) assess if interventions are sufficient to reach desired outcomes; (d) identify barriers to achievement of objectives; and (e) to provide recommended actions to guide the program staff through the last half of the program.

The evaluation is designed to examine the relationship between the various program activities and the observed differences in beneficiary health status. The goal is to gather credible evidence to answer whether the project did what it said it was going to do and to what extent this was accomplished.

Community Health Clubs (CHC) form the core of the project's health communication approach. The purpose of CHCs is to raise community awareness on health issues and encourage participation in project activities. The evaluation will pay special attention to establishing the contribution of the approach of Community Health Clubs (CHCs) used in behavior change communication to project outcomes. Evidence will be gathered on the effects of CHCs on project health outcomes within participating communities.

It is encouraged that the midterm evaluation, along with all other assessment activities of Child Survival Projects, should be a joint activity with partners and key stakeholders. MOHS partners in particular are encouraged to be part of the evaluation team for multiple reasons: to better assess the project through triangulation of different viewpoints (external, internal CARE and MOH management), to increase key partners familiarity with on-the-ground project activities, and to also provide an opportunity for continuous strengthening of partner capacity for evaluation and toolkit of methodologies.

Users
The following parties will receive the evaluation findings: CARE USA, CARE Sierra Leone, Ministry and Health and Sanitation in Sierra Leone & USAID.

Uses
The information generated will be applied and disseminated in several different ways. For CARE USA and CARE Sierra Leone this evaluation will serve as a tool for future program development and to use lessons learned in future programming opportunities. Local Government is a relatively new stakeholder who has been issued with the mandate of overseeing some health activities at district level. They may also be interested in the results of the evaluation mission and will be provided with the final report. Several members from the MOHS and from local government will be invited to participate in the evaluation mission and in planning for the dissemination and use of evaluation findings.

Questions
The following questions establish the boundaries for this evaluation exercise and state each aspect of the program that will be addressed.

- Did CSP achieve the impact/outcome level targets that were set? Are revisions to the project's final targets needed?
- Who benefits from the project and how?
- Are the participants satisfied with what they gained from the program?
- Are project partners, specifically the MOHS at the district level, and PHU in the field, satisfied with the program? How can collaboration with government and non-governmental partners be improved?
- What are the strengths and weaknesses of the program's approach and process?
- What project activities contribute most? Least? to community's development.

Methods

Table 1 below details information sources; data collection instruments as well as who will collect the data; what data management systems will be used; and what appropriate methods of analysis, synthesis, and presentation are to be used in the evaluation.

Table 1

8. METHODS
Information Sources • Project Proposal • Detailed Implementation Plan (DIP) • DIP Feedback • KPC Baseline survey report • LQAS Survey Report • Participatory Rural Communication Appraisal (PRCA) Report • Annual progress reports from 2003 to 2005 • COPE Assessment report • National survey data Project participants: Families, Community Health Club (CHC) members, Community Based Growth Promotion (CBGP) volunteers. Project counterparts and partners (village, chiefdom, district and national level): • CSP program staff at HQ and in the field • District hospital and PHU staff. • NGO partners • Other agencies
Data collection instruments: (multiple data sources will be used to cross-validate findings) *Options include: Client Oriented Provider Efficient (COPE) Assessment, interview, test, observation, group techniques, case study, document review and analysis, testimonials, photographs.* Qualitative Interviews will be carried out with project beneficiaries to assess the perceptions of the programme. Select COPE guides will inform the project on any changes in the quality of care of health care providers and will provide the project with information to assess improvements in services.

Who will collect the data? Focus Group Discussions/Semi-structured interviews – CARE Project staff and project partner staff
Methods of analysis FGD/Semi-structured interviews – isolate themes and group into a finite set of areas for overall consensus.
Synthesis The evaluation team will pull draft findings together during the mission. Final preparation of the draft findings is the primary responsibility of the Team Leader.
Presentation Draft findings will be presented at end of evaluation mission. Final presentation will be in the form of a final evaluation report circulated to all stakeholders. Preparation of the final report will be the responsibility of the Team leader with technical support from evaluation team, CARE USA and CARE Sierra Leone.

Agreements

Agreements will be drawn up to summarize the procedures and clarify roles and responsibilities among those who will be part of the evaluation plan such as the Ministry of Health and Sanitation, Local Council, project partners etc. The team leader will describe how the plan will be implemented with consideration for cost, personnel time and information requirements.

Elements of an agreement will cover the intended purpose, users, uses, questions, and methods, as well as a summary of the deliverables, time line, and budget building on what has been included in this TORs. The agreement can include all stakeholders but, at a minimum, it must involve the primary users, any providers of financial or in-kind resources, and those persons who will conduct the evaluation and facilitate its use and dissemination. The formality of an agreement might vary depending on existing stakeholder.

Evaluation Team

The Evaluation teams (two) will consist of both national and international experts. Members with experience in evaluating health projects will be invited to participate, as well as representatives from the MOHS, Local Government, USAID Sierra Leone and CARE Sierra Leone. Groups of investigators will be formed at the beginning of the survey and should include one member of project and at least one government health staff on each team. The options for team leaders include the Consultant or the Technical Advisor CARE USA or a national MOHS representative or the CARE Sierra Leone Health Advisor.

Qualifications of the Consultant: The Consultant, in the role of Team Leader, should have extensive experience monitoring and evaluating Child Survival Projects preferably in West African settings. Knowledge of the COPE methodology and the Child Survival Sustainability Assessment Framework as well as of USAID will be an asset. Experience leading qualitative research will be necessary. The Consultant will have worked with sectoral and/or multi-sectoral teams. In addition to a thorough knowledge of health programs in Sierra Leone, the Consultant

will be familiar with constraints to achieving health results with extremely poor women and their households within a post-conflict setting.

If possible, the Team Leader will assist in identifying and coordinating with the other members of the team, including finalizing their individual terms of reference, arranging schedules and timetables, and finalizing the methodology for the external evaluation.

Intended evaluation activities may include:

1. Meetings with staff from CARE USA, Government of Sierra Leone or Ministry of Health and Sanitation, and CARE Sierra Leone
2. Review of key project documents
3. Finalization of key questions and adoption of methodology and tools to collect and analyze data
4. Field visits to collect data from project participants, government, NGO counterparts and CSP staff
5. Analysis of the outputs from primary and secondary data collection
6. Presentation of the preliminary findings to CARE Sierra Leone staff and key stakeholders
7. Preparation and finalization of the report.

Timeline

The evaluation team is expected to be in Sierra Leone on the 19th of March 2006 with an initial meeting to be scheduled at CARE Sierra Leone's Freetown HQ on the 20th of March 2006. Field based activities will take place in Koinadugu District. A debrief of some of the initial findings will take place in Freetown at the end of the mission with a final report ready by the 5th of April 2006.

Proposed timeline

Activities	Timeline							
	Oct	Nov	Dec	Jan	Feb	March	April	May
Share the draft ToR with CARE USA and USAID								
Finalization of ToR								
Identification of External Evaluation Team								
Finalization of ToR for Qualitative survey								
Identification of agencies for qualitative surveys								
Qualitative survey								
Survey reports								
Finalization of Scope of Work for external evaluation team members								
Field review by external evaluation team members								
Final Evaluation Report								

Terms of Reference-Team Leader
Mid-term Evaluation of CARE Sierra Leone's Child Survival Project (CSP)
2006

Background

9. The Child Survival Project (CSP) XIX has been operating in Koinadugu District, Sierra Leone since 2003 with funding by USAID. Project activities commenced in October 2003 in collaboration with the Ministry of Health and Sanitation (MOHS).

10. The project goal is to improve the health status of children under five years of age and women of reproductive age in five chiefdoms in Koinadugu district. The district is located in the northeastern part of Sierra Leone. Direct beneficiaries of the project include an estimated 48,630 children less than five years of age and 51,491 women aged 15-49 years living in five of the district's 11 chiefdoms. This catchment area includes the District Hospital and 21 Peripheral Health Units (PHU). People living in the district's remaining six chiefdoms are secondary beneficiaries of the project, particularly through capacity building of district-level MOHS staff.

11. Intervention areas include: expanded program of immunization (EPI), nutrition, malaria and maternal and newborn care (MNC) through a grassroots, civil-society building variation of the overarching Community Integrated Management of Childhood Illness (C-IMCI) approach.

12. The objectives of the project are:
    a. Strengthened family and household knowledge and decision-making skills related to health of women and children resulting in the practice of positive behaviors to prevent, recognize and manage common diseases;
    b. Enhanced community capacity to form groups and institutions that sustain health initiatives, demonstrate social cohesion, and promote good governance mechanisms;
    c. Improved quality and accessibility of services provided by MOHS personnel and MOHS extension services;
    d. Ensured sustainability of the activities and achievements of the project.

13. These objectives will be reached using four main strategies:
    e. capacity building of institutions and partners through training;
    f. organizational diagnosis activities and subsequent action on areas of need.
    g. Behavior Change Communication (BCC) activities to promote physical health, prevent disease, improve home management of disease, promote appropriate care-seeking practices among caretakers and household members, and improve practices of health care providers.
    h. Quality Assurance initiatives, largely based on the Client Oriented Provider Efficient (COPE) process, include the development of protocols and instruments that will guide an innovative system of creating opportunities for peer feedback.

14. Health Clubs have been formed, composed of 1,882 village health volunteers who are active in their communities.

15. The CSP commenced its Sustainability Assessment (CSSA) prior to the development of the project's Detailed Implementation Plan (DIP) and has continued to reflect on Sustainability of health outcomes throughout the project's implementation process.

16. CARE Sierra Leone is the executing Agency for the project. CARE Sierra Leone and the Ministry of Health and Sanitation implement the project in collaboration with partners such as Christian Extension Services (CES) and Radio Bintumani. With the recent devolution of some health services to local government, local government at district level is emerging as a strong stakeholder working towards improving the quality of health services.

Scope of Work

CARE Sierra Leone will undertake a Mid-term Evaluation of the achievements to inform the review of project activities based on Child Survival Health Grants Project recommendations.

A Health Evaluation Consultant contracted by CARE USA in Atlanta will undertake the review with the responsible CARE USA and Sierra Leone Technical Specialists. Work will take place in Freetown and Koinadugu District through field visits to the project areas. Specific teams to conduct the exercise will be organised at the onset of the evaluation exercise.

Statement of Services

Health Evaluation Consultant

Qualifications of the Consultant: The Consultant will have extensive experience monitoring and evaluating health services in the region, preferably in West Africa. USAID experience will be an asset. The Consultant will have worked with sectoral and/or multi-sectoral teams. In addition to a thorough knowledge of health programs in Sierra Leone, the Consultant will be familiar with constraints to achieving positive health results with extremely poor women and their households.

The Consultant will familiarize himself/herself with the key project documents (see Annex A) and will propose a methodology to achieve the following:

a. Draft Work plan and level of effort submitted to CARE USA 2 weeks before the start of the mission; (4 days)
b. Work plan finalized 1-2 weeks ahead of the mission on the basis of CARE USA and CARE Sierra Leone's feedback; (1 day)
c. CARE USA, and CARE Sierra Leone staff briefed on the mission objectives, TORs and work plan; (1 day)
d. Through planned visits to project and non-project areas assess results achieved with beneficiaries; (5 days)

e. Identify progress in relation to planned results as well as unanticipated results (positive and negative) achieved;
f. Identify changes in context and the implications for the pilot design;
g. Assess the continued appropriateness of the design and recommend modifications if required;
h. Consider the wider application of results achieved to date for future work with similar target groups;
i. Prepare a draft evaluation report and recommendations for discussion with (I) CARE USA, and (ii) CARE Sierra Leone (3 days)
j. Provide a written report and recommendations within 10 days of departure from Sierra Leone and a final report within 5 days of receipt of CARE USA's comments. (5 days)

Deliverables

Draft and final reports are to be compiled and submitted by the Team Leader as per the stipulated Child Survival Health Grants Programs (CSHGP) guidelines for project Mid-term evaluations.

Level of effort

Timing and duration of mission

The mission will commence in Freetown, Sierra Leone on the 20th of March 2006. A contingency allowance of 2 days will be built into the contract in case of disruptions to the schedule as a result of political or disturbances or unforeseen circumstances. The final report is due to CARE Sierra Leone on the 5th of April 2006.

SUMMARY OF COUNTRY OFFICE PROJECT MATCH FUNDING STATUS - Child Survival Project (SLE035)

All Figures in US$

Fund Codes	Sources	PROJECT DURATION		% contribution	% contribution	Total Project cost	Donor's commitment in US$	Required CO match amount in US$	CO secured match funding in US$	Current matching GAP amount	Comments
		Start date	End date	Donor	CO	LOP	LOP	LOP	As of date	LOP	
SL211	**USAID - Prime donor**	**1-Oct-03**	**30-Sep-08**	**74%**	**26%**	**1,709,315**	**1,263,583**	**445,732**	-	-	
SL213	CARE USA	1-Jul-04	30-Sep-08						40,000		Fund fully utilized
	SWARMU contribution	1-Jul-03	30-Jun-04						44,000		Fund fully utilized & Closed
SL214	JOA I CARE UK	1-Jul-04	31-Jan-05						46,602		Fund fully utilized & Closed
SL222 *	JOHN MARTELLO FUND I	1-Jul-04	28-Feb-05						80,000		Fund fully utilized & Closed
SL235 *	Cable Company	1-Dec-04	5-Dec-05						7,009		Fund fully utilized
SL236 *	JOHN MARTELLO FUND II	31-Dec-05	31-Dec-05						73,000		Balance $25,000.00
						1,709,315	**1,263,583**	**445,732**	**290,611**	**155,121**	

* including ICR as applicable

CSHGP Project Data Sheet (Sub Form 1 of 7)

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

General Project Information: <Help>

Cooperative Agreement Number:	GHS-A-00-03-00013-00
CARE HQ Backstop Person:	Khrist Roy
Project Grant Cycle #:	19
Project Start Date:	9/30/2003
Project End Date:	9/29/2008
USAID Mission Contact Person:	Seydou Doumbia

Project Field Contact Information:

Field Program Manager :

Name:	Boiketho Matshalaga
Title:	Child Survival Porject Manager
Email:	ketho@sl.care.org
Telephone:	232-22-234-227
Additional Project Address Information	
Address:	35 & 35A Wilkinson Road
City:	Freetown
State:	
Country:	Sierra Leone
Fax:	232-22-234-280

Alternate Field Contact

First Name:

Last Name:

Title:

Email:

Address1:

Address2:

City:

State:

Zip Code:

Country: Sierra Leone

Telephone:

Fax:

Project Web Site:

Grant Funding Information:

USAID Funding:*(US $)* $1,488,582

PVO Match:*(US $)* $520,725

Project Description:

The goal of the Project is to improve the health status of children under five and women of reproductive age.

CARE in partnership with PHU will implement interventions in expanded program of immunization (EPI), nutrition, malaria and maternal and newborn care (MNC) through a grassroots, civil-society building variation of the overarching Community Integrated Management of Childhood Illness (C-IMCI) approach.

CARE will also work with community health providers – Blue Flag Volunteers (BFVs), traditional birth attendants (TBAs), traditional practitioners, and drug peddlers –or

through the HCs. The Project will collaborate with the Ministry of Health and Sanitation (MOHS) in district-wide activities to train PHU staff in IMCI, expand and improve services, and plan a Behavior Change Communication (BCC) campaign to improve family and community practices.

The CARE capacity-building strategy will work through a partnership structure, with local organizations such as HCs, Talking Drum (TD) and Norway-Sierra Leone Health Project (NSL).

Project Location

Northern Province, Koinadugu District,Sierra Leone

CSHGP Project Data Sheet (Sub Form 2 of 7)

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

Partner Information: <Help>

Partner Name:

1.

Partner Type:

Select the Partner Type

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

Project Location / Subareas:

<Help>

Does this project collect, monitor and report on Rapid CATCH data for different *geographic* project subareas ?

○ Yes ◉ No

If this is true, click *Yes* and enter each distinct subarea name:
If this is false, click *No*.

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

Strategies: <Help>

The following 3 boxes list different kinds of general strategies, assessment tools and BCC strategies that could be implemented during the life of this CSHGP project.
Please check those boxes that are planned for this project.

General Strategies:	
Microenterprise ☐	Social Marketing ☐
Private Sector Involvement ☐	Advocacy on Health Policy ☐
Strengthen Decentralized Health System ☑	Information System Technologies ☐
Use Sustainability Framework (CSSA) ☐	

M&E Assessment Strategies:	
KPC survey ☑	Health Facility Assessment ☑
Organizational Capacity Assessment with Local partners ☑	Organizational Capacity Assessment for your own PVO ☐
Participatory Rapid Appraisal ☐	Participatory Learning in Action ☐
Lot Quality Assurance Sampling ☑	Appreciative Inquiry-based strategy ☐
Community-based Monitoring Techniques ☑	Participatory Evaluation Techniques(for mid-term or final evaluation) ☑
Use of Pocket PCs or Palm PDA Devices ☐	TB Cohort Analysis ☐

Behavior Change & Communication (BCC) Strategies:	
Social Marketing ☑	Mass Media ☑
Interpersonal Communication ☑	Peer Communication ☐
Support Groups ☑	Use of BEHAVE Framework ☐

Capacity Building: <Help>

Please check the box next to each capacity building area or group that is targeted for institutional strengthening during the life of this CSHGP project:

PVO	Non-Govt Partners	Private Sector	Govt	Community
US HQ (General) ☐ US HQ (CS Unit) ☑ Field Office HQ ☑ CS Project Team ☑	PVOs (Int'l./US) ☑ Local NGO ☑ Networked Group ☐ Multilateral ☐	Pharmacists or Drug Vendors ☐ Business ☐ Traditional Healers ☑ Private Providers ☐	National MOH ☑ Dist. Health System ☑ Health Facility Staff ☑ Other National Ministry ☐	Health CBOs ☑ Other CBOs ☐ CHWs ☑ FBOs ☐

Project Interventions & Components: <Help>

Enter a percentage representing the amount of funds your project is targeting towards each intervention. If you are not implementing a particular intervention then leave the box blank. On the same line as the intervention percentage, check the boxes indicating whether or not this intervention is part of an overall IMCI strategy and also check the kinds of training (CHW or HF)envisioned for this particular intervention. For each intervention implemented, check the specific intervention components that are planned.

Immunizations 15 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
	Classic 6	Vitamin A	Surveillance ☐

Polio ☐	Vaccines ☑	☐	
Cold Chain Strengthening ☐	New Vaccines ☐	Injection Safety ☐	Mobilization ☑
Measles Campaigns ☐	Community Registers		

Nutrition 10 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
ENA ☐	Gardens ☐	Comp. Feed. from 6 mos. ☑	Hearth ☐
Cont. BF up to 24 mos. ☐	Growth Monitoring ☐	Maternal Nutrition ☑	

Vitamin A %	IMCI Integration ☑	CHW Training ☐	HF Training ☐
Supplementation ☐	Post Partum ☐	Integrated with EPI ☐	Gardens ☐
Micronutrients 10 %		CHW Training ☐	HF Training ☐
Iodized Salt ☐	Iron Folate in Pregnancy ☑	Zinc (Preventive) ☐	Food Fortification ☐
Pneumonia %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Pneum. Case Mngmnt. ☐	Case Mngmnt. Counseling ☐	Access to Providers Antibiotics ☐	Recognition of Pneumonia Danger Signs ☐
Zinc ☐	Community based		

	treatment with antibiotics ☐		
Control of Diarrheal Diseases ____ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Water / Sanitation ☐	Hand Washing ☐	ORS / Home Fluids ☐	Feeding / Breastfeeding ☐
Care Seeking ☐	Case Mngmnt. / Counseling ☐	POU Treatment of water ☐	Zinc ☐
Malaria 35 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
Training in Malaria CM ☐	Adequate Supply of Malarial Drug ☐	Access to providers and drugs ☐	Antenatal Prevention Treatment ☐
ITN (Bednets) ☑	ITN (Curtains and Other) ☐	Care Seeking, Recog., Compliance ☐	IPT ☐
Community Treatment of Malaria ☐	ACT ☐	Drug Resistance ☐	Environmental Control

Maternal & Newborn Care 30 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
Emerg. Obstet. Care ☐	Neonatal Tetanus ☐	Recog. of Danger signs ☐	Newborn Care ☐

Post partum Care ☐	Delay 1st preg Child Spacing ☐	Integr. with Iron & Folate ☑	Normal Delivery Care ☐
Birth Plans ☑	STI Treat. with Antenat. Visit ☐	Home Based LSS ☐	Control of post-partum bleeding ☐
PMTCT of HIV ☐	Emergency Transport ☐		
Child Spacing ☐ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Child Spacing Promotion ☐	Pre/Post Natal Serv. Integration ☐		

Breastfeeding ☐ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Promote Excl. BF to 6 Months ☐	Intro. or promotion of LAM ☐	Support baby friendly hospital ☐	PMTCT of HIV ☐
HIV/AIDS ☐ %		CHW Training ☐	HF Training ☐
OVC ☐	Treatment of STIs ☐	Behavior Change Strategy ☐	Access/Use of Condoms ☐
STI Treat. with Antenat. Visit ☐	ABC ☐	PMTCT ☐	Nutrition ☐
Home based care ☐	PLWHA ☐	ARVs ☐	HIV Testing ☐

Family Planning & Reproductive Health ☐	IMCI Integration ☐	CHW Training	HF Training ☐

%			
Knowledge / Interest	FP Logistics	Community-Based Distribtuion	Social Marketing
Male Reproductive Health	Youth FP Promotion	Quality Care	Human Capacity Development
FP / HIV integration	Maternal / Neonatal Integration	Cost Recovery Schemes	Community Involvment
Access to Methods	Policy		

Tuberculosis %	IMCI Integration	CHW Training	HF Training
Facility based treatment / DOT	Microscopy	Monitoring / Supervision Surveillance	Community IEC
Drug managment	Advocacy / Policy	Linkages with HIV services	Community based care / DOT
Pediatric TB			

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

Target Beneficiaries: <Help>	
Infants < 12 months:	4,517

Children 12-23 months:	3,877
Children 0-23 months:	8,394
Children 24-59 months:	9,921
Women 15-49 years:	51,491
Population of Target Area:	112,921

Project: CARE - Sierra Leone (2003 - 2008) - Standard Project

Rapid CATCH Data:

Click on the Red link (under the 'Stage' column) to view / access / update Rapid Catch data for that phase of the project.

If data has already been entered for a particular phase, the date of first entry will appear under the 'Date' column and an 'X' will appear under the 'Entered' column.

Date	Stage	Entered
24-Jun-04	DIP	X
	Mid Term	
	Final Evaluation	